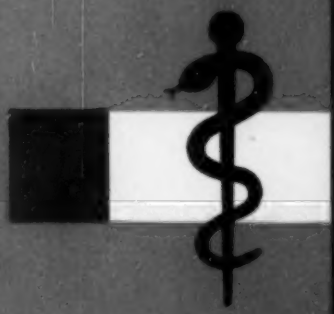
THE JOURNAL OF GENERAL PRACTICE

Medical TIMES



VOL. 78 SEPTEMBER 1959 NO. 9

drowsiness *minimized . . .*

allergic patients remain alert . . .

Clinical reports describing the use of Thephorin in 2564 patients with hay fever and other allergies indicate an incidence of drowsiness of only 2.92%. In contrast with other antihistamines, Thephorin can therefore be given to motorists and other patients who have to remain alert. Highly effective and well tolerated in most cases, Thephorin is available in 25-mg tablets and as a palatable syrup which permits convenient adjustment of dosage.

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Thephorin®

brand of phenindamine

'Roche'

How many *really drop* on the floor?

Every salesman of cheap hypodermic syringes has one stock argument which runs like this – "Why pay more because they all break when you drop them on the floor?"

Floors were just as hard forty years ago as they are today and nurses were nurses even then. Yet, in the past forty years the life of hypodermic syringes in hospitals has been extended many, many hours.

The answer is, of course, that most syringes do not drop on the floor. In fact fifty per cent of the syringe breakage in hospitals occurs at or around the tip of the syringe. This fact can be demonstrated.

When making hypodermic purchases, you don't buy just a hypodermic syringe, you buy "hypodermic service".

Hypodermic Service is the true cost-in-use of hypodermic syringes and needles over a period of a month or a year. What you pay for HYPODERMIC SERVICE depends, not on the initial cost of syringes, but on how long a life of useful service those syringes give you. Longer service means dollars and cents saved.

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Made for the Profession

For *maximum* HYPODERMIC SERVICE
always use
B-D Needles with B-D Syringes

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Potency---
15 mcg.
Vitamin B 12
per fl. oz.

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- High potency ferrous iron—Fe 3 gr.
- Soluble constituents from 2 ounces whole fresh beef liver
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FORTIFIED

Palatable and well tolerated: assures rapid and sustained benefit.

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CONTENTS

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CONTENTS

drain swampy tissues

MERCUHYDRIN is unexcelled for draining edematous tissues of cardiac or renal origin.

MERCUHYDRIN®

SODIUM

well tolerated locally, a diuretic of choice

effective To remove excess body fluid, water-binding sodium must be eliminated.[1,2] This MERCUHYDRIN does. Clinical investigation has shown that "the average total excretion of sodium in 24 hours was increased more than four times by MERCUHYDRIN injections."[3]

well tolerated systemically Both experimental[4] and clinical[5,6] evidence attest to the relative safety of MERCUHYDRIN. Exhaustive renal function tests and electrocardiographic studies have demonstrated that it is notably free from unfavorable clinical effect.[5,6]

high local tolerance MERCUHYDRIN is outstanding for its local tissue tolerance.[7] High local tolerance permits intramuscular administration – with minimal irritation and pain – as often as required for the frequent-dosage schedule of current clinical practice.

MERCUHYDRIN (meralluride sodium solution) is available in 1 cc. and 2 cc. ampuls.

bibliography: (1) Donovan, M. A.: New York State J. Med. *45*:1756, 1945. (2) Fraser, P. B., and Burch, C. E.: Proc. Soc. Exper. Biol. & Med. *63*:543, 1946. (3) Griggs, D. E., and Johns, V. J.: California Med. *69*:133, 1948. (4) Chapman, D. W. and Schaffer, C. F.: Arch. Int. Med. *79*:449, 1947. (5) Modell, W.; Gold, H., and Clarke, D. A.: J. Pharmacol. & Exper. Therap. *84*:284, 1945. (6) Finkelstein, M. B., and Smyth, C. J.: J. Michigan M. Soc. *45*:1618, 1946. (7) Gold, H., and others: Am. J. Med. *3*:665, 1947.

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MEDICAL BOOK NEWS

save **68** *more fetal lives in habitual abortion, threatened abortion and premature labor*

des

A review of the pertinent literature reveals that while the administration of diethylstilbestrol (**des**) will bring 86.6% of cases to term (1), progesterone will bring only 18.2% to term (2), a very significant difference of 68.4%. Karnaky (3) found in his study of 35 women who were treated with massive doses of **des** that all pregnancies carried to term. This evidence shows that at least 68.4% more fetal lives may be saved with **des.**

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des 25 mg. tablets of Grant Process highly micronized triple crystallized diethylstilbestrol U.S.P. XIII are available in containers of 30, 100, and 500 tablets.

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Bio-des is available in vials of 10cc. and 30cc.

REFERENCES:

(1) Rosenblum, G. and Melinkoff, E. Preservation of the Threatened Pregnancy with Particular Reference to the Use of Diethylstilbestrol. West. Jr. Surg. Obs. and Gyn. 55, 597-603. Nov. 1947.

(2) Silbernagel, W. M. and Burt, O. P. Ohio State Med. Jr. 39, 430, May 1943.

(3) Karnaky, K. J. Estrogenic Tolerance in Pregnant Women. Amer. Jr. Obs. and Gyn. 53, 312-316. 1947.

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Medical TIMES

THE JOURNAL OF GENERAL PRACTICE

Incorporating the Long Island Medical Journal and Western Medical Times

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for the treatment of ventricular arrhythmias

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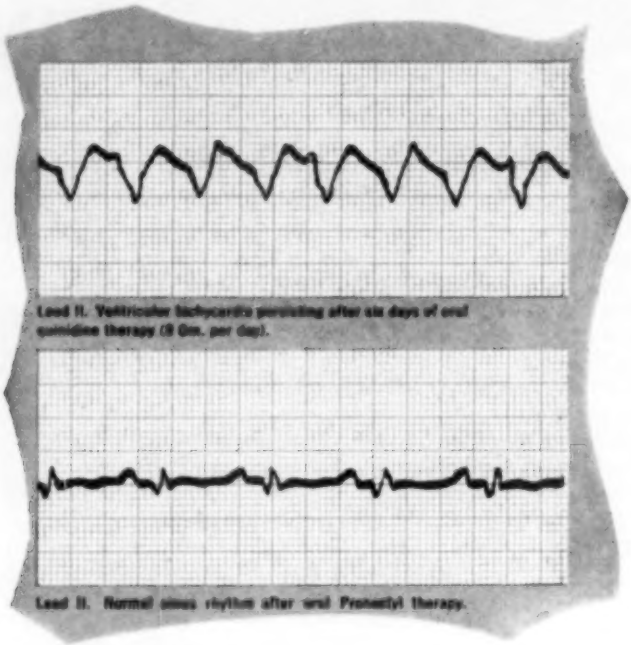
Squibb Procaine Amide Hydrochloride



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Cullick, L. and Ogden, H. D.: J. South Med. Assn. 43: No. 7, July 1950

INDICATIONS:	Hay fever, vasomotor rhinitis, urticaria, allergic dermatitis and pollen asthma.
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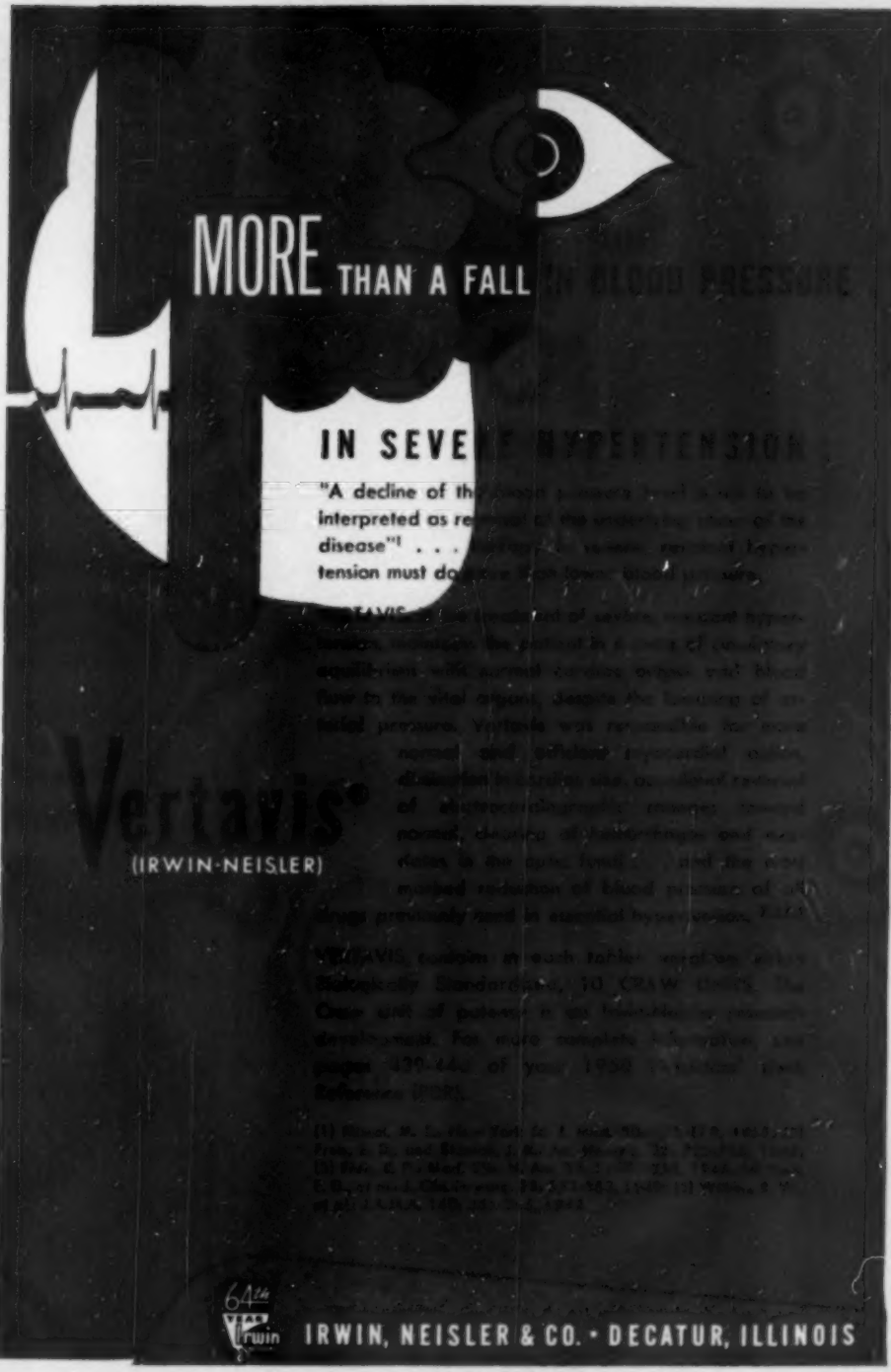
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IN SEVE
"A decline of th
interpreted as re
disease"[1] . . .
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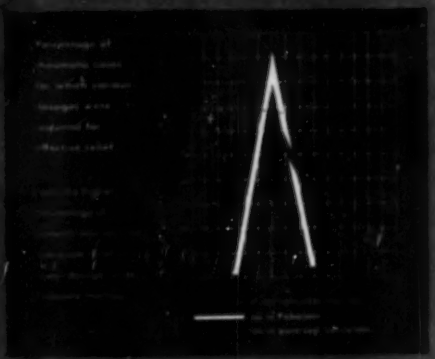

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of Pabalate therapy is indicated by the higher percentage of rheumatic patients securing adequate relief on lower dosages, than with sodium salicylate.*

PROLONGED (24 HOUR) RELIEF

from pain is afforded by Pabalate whereas 72% of those receiving pure salicylate in a clinical test required additional dosages, ½ to 1½ hours before due.*

COMPLETE FREEDOM FROM TOXICITY

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antirheumatic superiority . . .

"The greater efficacy of this preparation is clearly manifested when one considers that whereas only sixty-eight per cent of the patients got relief from 0.6 Gm. doses of sodium salicylate, ninety-two per cent got equal relief on the same dosage of sodium salicylate in the form of Pabalate, probably because of its para-aminobenzoate component. Toxicity [was] not reported by any of the patients during the administration."

— *Journal-Lancet* 70:192, 1950

Experience in the administration of the antirheumatic Pabalate confirms the efficacy, reliability and safety[6] of its synergistic combination of salicylate and para-aminobenzoic acid.[1,2,3,4,5] Pabalate has been reported not only to provide "twenty-four hour pain relief,"[6] but its use (unlike that of salicylate alone) carries a high degree of freedom from toxic reactions.[6]

INDICATIONS rheumatoid arthritis, fibrositis, acute rheumatic fever, gout, osteoarthritis. The Liquid is also recommended as a replacement for analgesic-antipyretic medication generally.

FORMULA each Pabalate Tablet or each 5 cc. (one teaspoonful) of Pabalate Liquid contains sodium salicylate, U.S.P. (5 grs.) 0.3 Gm.; para-aminobenzoic acid (as the sodium salt) (5 grs.) 0.3 Gm.

SUPPLIED Pabalate Tablets are supplied in bottles of 100 and 500; Pabalate Liquid in pints and gallons.

REFERENCES

1. Beckman, H.: Treatment in General Practice, 6th ed., W. B. Saunders Co., Phila., 1948.
2. Belisle, M.: Union méd. du Canada, 77:392, 1948.
3. Dry, T. J. et al.: Proc. Staff Meet., Mayo Clin., 21:497, 1946.
4. Rosenblum, H. and Fraser, L. E.: Proc. Soc. Exper. Biol. & Med., 65:178, 1947.
5. Salassa, R. M., et al., J. Lab. & Clin. Med., 33:1393, 1948.
6. Smith, R. T.: J. Lancet, 70:192, 1950.

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*The data for these graphs are derived from the tabular material accompanying "*Treatment of Rheumatoid Arthritis and other Rheumatic Conditions with Salicylate and Para-Aminobenzoic Acid: a study of 125 patients.*" by Richard T. Smith, J. Lancet, 70:192, 1950.

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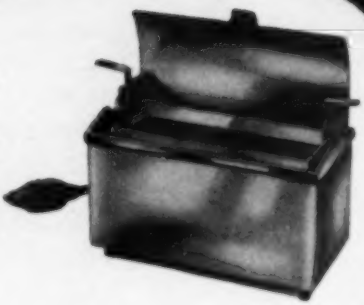

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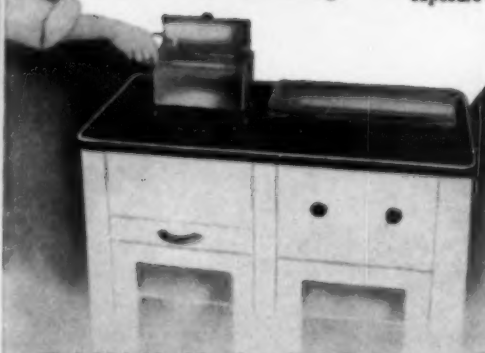
a compact and dependable BOILING WATER sterilizer especially suitable for syringes, needles and the many steel surgical instruments the efficiency of which are not impaired by repeated exposure in the medium of boiling water.



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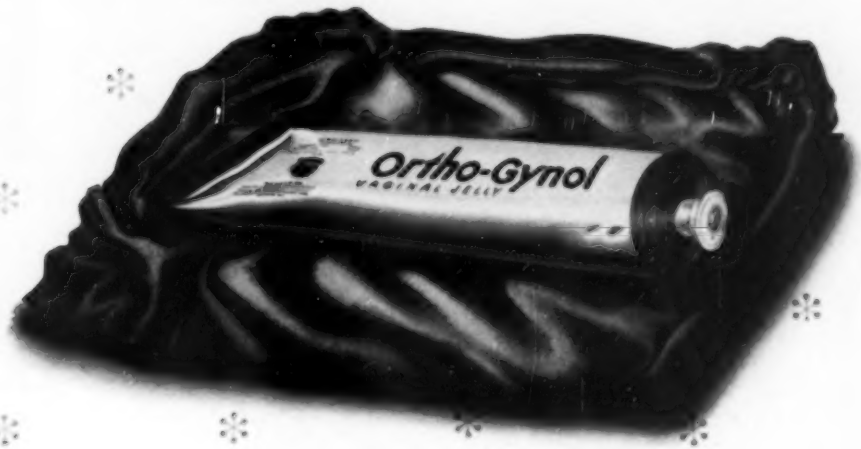

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*Hurlbutt, F. R. The Use of Nidoxital in Emesis Gravidarum. Am. J. Obst. & Gynec. 59:438 (Feb.) 1950.

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according to therapeutic plan... HYDROCHOLERESIS

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Each 0.6 cc. represents:

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RHEUMATIC CASES OF

FOUND OUTSTANDING RELIEF

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Clinical work now being carried on with GENTARTH on arthritic patients, some of whom have been suffering for 30 to 35 years, reveals that this new Raymer formula gave relief beyond that ever experienced with any previous drug. *Not a single case of intolerance has been reported.* Furthermore, toxicologic reports indicate that on a weight-for-weight basis, GENTARTH is less toxic than aspirin.

GENTARTH *contains in each salol-coated tablet:*

Sodium Gentisate	*100 mg.*
Raysal	*325 mg.*
(representing 43% Salicylic Acid and 3% Iodine in a Calcium-Sodium Phosphate Buffer Salt Combination)	
Succinic Acid	*130 mg.*

Recommended dosage:
2 or more tablets, 3 or 4 times daily (after meals and before bedtime)

Available at all pharmacies on prescription

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30-35 YEARS' STANDING

WITH GENTARTH

The New Gentisate-Containing Anti-rheumatic

GENTARTH INHIBITS SPREAD OF HYALURONIDASE

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[1] Meyer, K. & Ragan, C.: Mod. Concepts of Card. Disp., 17:2 (1948)
[2] Quick, A. J.: J. Biol. Chem., 101:475 (1933)
[3] Guerra, J.: J. Pharm. Exp. Ther., 87:1943 (1946)

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This department is offered as an Open Forum for the discussion of topical medical issues. All letters must be signed. However, to protect the identity of writers, who are invited to comment on controversial subjects, names will be omitted when requested.

COUNTRY DOCTOR

"I am practicing in Bowman, N. D., which has approximately 7,000 people in the trade vicinity, and have found myself taxed to the utmost to keep up with the rigorous demands of the people and the climatic conditions. For two years I have been trying to entice a young surgeon to join me, to help carry the terrific load, and to do the surgery in our third-of-a-million-dollar community hospital now under construction.

"However, it seems that all the doctors born in the country want to go to the big city, while all the urban raised men don't seem to care for country practice, or are afraid to try it. So far, I have had only one nibble in all that time, from a Cleveland surgeon, who is, I think, seriously considering, but finds the transition from metropolitan to farming surroundings somewhat staggering.

"The many advantages of city practice are obvious, and don't need repetition here; the attractions in the country are a bit more subtle. The more intimate contact with the patient—the challenge in being on your own, far from any help or consultation—the pioneering needed to educate and train the people in public health—the building up of a medical

—Continued on page 34a

quick relief and healing

in peptic ulcer...

Resinat, pepsin inactivator and antacid, brings quick relief of pain and speeds healing of peptic ulcer.

Weiss, S., et al.,[1] used Resinat in the treatment of 120 ulcer patients. These investigators report "symptomatic relief occurred within 48-72 hours and x-ray follow-up showed regression of ulcer crater in two to four weeks."

Resinat is insoluble, chemically and physiologically inert. It does not remove chlorides; phosphates, vitamins or minerals from the body. It does not alkalinize the system or cause acid rebound.

Resinat inactivates pepsin and neutralizes excess gastric acidity.

Available in Capsules, 0.25 Gm.—Tablets, 0.5 Gm.—Powder, 1 Gm. Packets.

1. Weiss, S., et al.: Rev. Gastroenterology 16:501-509 (June) 1949.

Literature and samples available.

More than Half a Century of Service to the Medical Profession

The National Drug Company
Philadelphia 44, Pa.

now to sleep—
perchance to dream
undisturbed
by night-time **itch**

EURAX®

ANTIPRURITIC CREAM

EURAX antipruritic cream, applied to the itching area before retiring, is your patient's best assurance of a full night of undisturbed sleep.

A totally new antipruritic . . . EURAX, original product of Geigy research . . . sets new standards in the treatment of pruritus. In a carefully controlled study[1] EURAX provided "excellent (complete) relief" in 66.2 per cent of cases, and "moderate (considerable) relief" in 27.4 per cent. In most instances a single application ensured relief for 6-8 hours or more. In no case did the cream lose its effectiveness on continued application.

Not an antihistaminic . . . not a -caine derivative . . . not a phenol preparation . . . EURAX gives quicker, longer-lasting itch control with notable absence of local irritation, sensitization or systemic toxicity.[2]

As a specific in the treatment of scabies EURAX Cream in a single application eradicates the infection in over 90% of cases.[3] A second application gives practically a 100% cure rate.[4] No prior bathing or scrubbing required. Bacteriostatic, EURAX accelerates healing in infected scabies.

Geigy

1. Couperus, M.: J. Invest. Dermat. *13*:35, 1949.
2. Patterson, R. L.: Southern M. J. *43*:449, 1950.
3. Peck, S. M. and Michelfelder, T. J.: New York State J. Med. In press.
4. Tronstein, A. J.: Ohio State M. J. *45*:809, 1949.

EURAX (brand of crotamiton) Cream: 10% N-ethyl-o-crotonotoluide* in a vanishing cream base supplied in tubes of 20 Gm. and 60 Gm. and jars of 1 lb.

*U.S. Pats. #2,505,681 2,505,662

E-19

GEIGY CO., INC., Pharmaceutical Division, 89-91 Barclay St. • New York 8, N. Y.

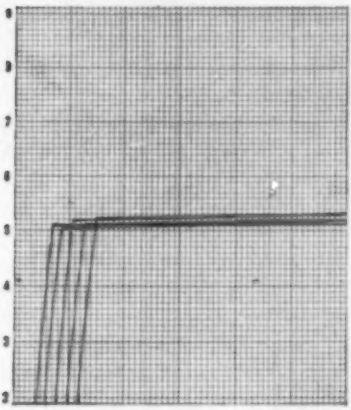
An advance in surgical silk

NEW IMPROVED

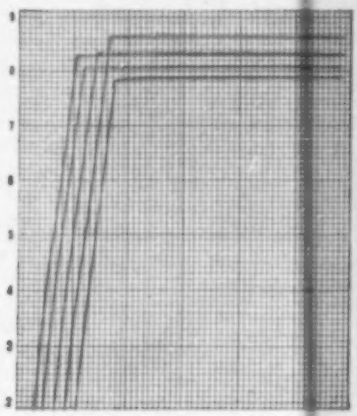
ANACAP®

SURGICAL SILK

Greater tensile strength – Improved Anacap Surgical Silk permits use of small diameters in all situations requiring silk. Tensilgrams show the difference between new Anacap and ordinary surgical silks.



An ordinary surgical silk meeting minimal U.S.P. requirements, size 00, breaks relatively easily when subjected to mechanical pull.



Improved Anacap Surgical Silk, size 00, has greater tensile strength, is much more resistant to breaking.

Can be sterilized repeatedly – In laboratory tests after 47 separate boilings, each of 30 minutes, size 4-0 Anacap Surgical Silk looses less than 0.2 pound tensile strength yet maintains absolute non-capillarity.

Flexible, not limp – New Anacap Surgical Silk handles as smoothly as fine flexible surgical gut. Never limp, it enhances surgical technic – speeds operative procedure.

Economical – Anacap Surgical Silk can be resterilized twice as often as many other silks.

In sizes 6-0 to 5 on spools of 25 and 100 yards; sterile in tubes with and without D & G Atraumatic® needles attached.

DAVIS & GECK, INC.

57 Willoughby Street *Brooklyn 1, N. Y.*

LETTERS TO THE EDITORS

—Continued from page 30a

center, on a small scale, to meet the needs of the community—and, of course, the recreation afforded in taking a shot at a pheasant before going to the office—all these things are a bit difficult to evaluate until you have tried them yourself.

"Perhaps you may hear of some brave soul who wants to try his hand. In the meantime, I would rather work 24 hours a day for peanuts than to have to subject my patients to the usual bungling bureaucracy typical of the present administration."

Robert L. Goulding, M.D.,
Bowman, N. D.

MANY VETERANS ABUSE HOSPITAL OATH LAW

"After two years experience in a V. A. hospital, I believe a lot of costly waste could be eliminated if only service connected illnesses were treated. If not this, at least a strict adherence to the so-called 'pauper clause' which every patient signs on being admitted to a Veterans Administration hospital. At the present time this 'pauper clause' is but a joke as patients who have salaries quite adequate to afford private hospitalization are the rule rather than the exception.

"It is becoming a rather accepted practice for one to accept 'something for nothing' but if even these patients could realize the high cost of hospitalization paid for indirectly by their own taxes, I am sure that even they would not be able to stomach it. I am afraid that all that would be necessary for practically the entire male population of the country to become 'veterans' and therefore eligible for hospitalization, would be another war which would raise the number of veterans from around 19,000,000 at the present

—Continued on page 48a

mm/Hg

HOW DO YOU MEASURE BLOODPRESSURE, DOCTOR?

DO YOU USE ACTUAL MILLIMETERS OF MERCURY?

—— OR A SUBSTITUTE?

Michael Servetus (1511-53) who first stated the hypothesis of the pulmonary circulation.

MEDICAL PRACTICE has undergone many changes since the time of Michael Servetus. Yet certain fundamental discoveries, like the law of gravity, are no different today. The actual mercury column remains the standard* measure of bloodpressure. The BAUMANOMETER is built on the principle by which all other types of bloodpressure apparatus are regularly checked for accuracy.*

Yes, the BAUMANOMETER can be depended upon to give you the accurate readings you need for correct diagnosis and treatment. This instrument has been designed to meet *your* requirements, as you have expressed them through the past decades.

There is a BAUMANOMETER to meet your every need. The handy, portable **STANDBY** model, calibrated to 300 mm/Hg is easily moved from place to place in office or hospital. The **WALL** model, for examining rooms and the **300** model, for desk use, are also calibrated to 300 mm/Hg. Finally, there is the **KOMPAK** model, that registers to 260 mm/Hg and weighs only 30 ounces. It will carry handily in your bag.

All are scientifically accurate, all are sturdy, and simple to use. All are equipped with the new accurate **AIR-LOK CUFF**, so simple to use it can be applied in a matter of seconds.

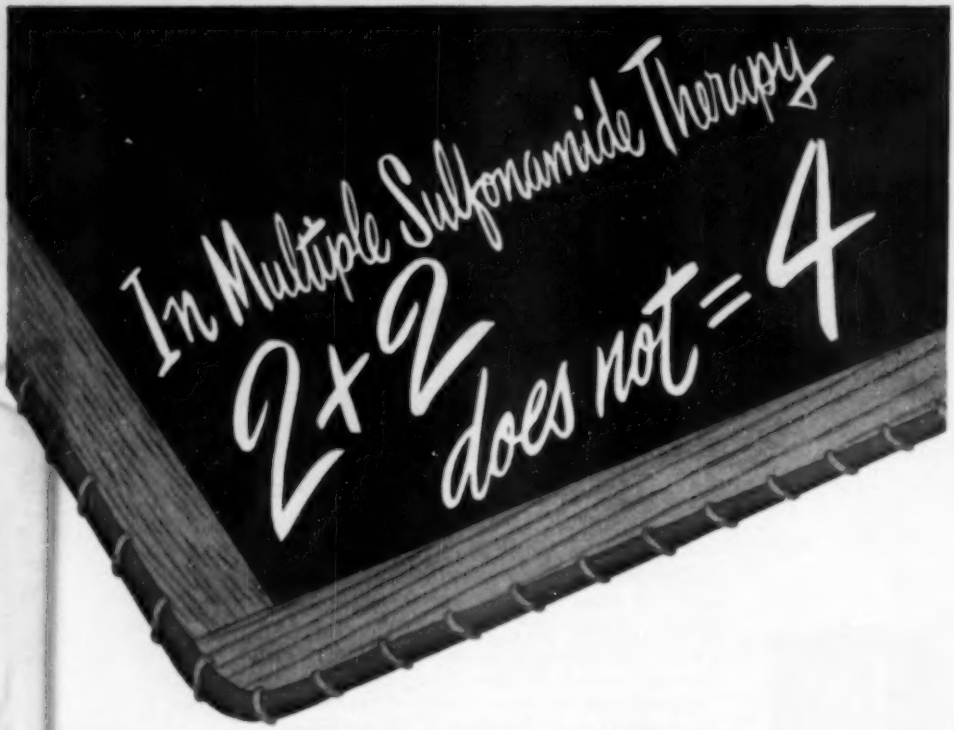
**May we send you a copy of U. S. Bureau of Standards Technologic Paper No. 352 "Use and Testing of Sphygmomanometers."*

Your surgical instrument dealer can supply

Lifetime Baumanometer

SINCE 1916 ORIGINATORS AND MAKERS OF BLOODPRESSURE APPARATUS EXCLUSIVELY

W. A. BAUM CO., INC. · NEW YORK 1, N.Y.



Therapeutic action is additive, but the total urinary solubility of two sulfonamides is significantly greater than that of either alone.

Aldiazol-M, a dual sulfonamide, contains both sulfadiazine and sulfamerazine in microcrystalline form, and the alkalizing salt, sodium citrate. Aldiazol-M increases the field of useful application of sulfonamide therapy because:

Blood levels are produced more rapidly. The microcrystalline form of the sulfa drugs is absorbed more quickly, leading to higher initial levels.

Hazard of renal complications is reduced. Because of the greater solubility of dual sulfonamide mixture, urinary precipitation is prevented, virtually eliminating crystalluria.

Greater therapeutic efficacy is obtained. Aldiazol-M can be given safely in adequate dosage, and effective blood levels maintained in adults on a dosage of 2 teaspoonfuls every four hours.

Widely indicated. Aldiazol-M is indicated whenever the specific actions of sulfadiazine and sulfamerazine are required. It is valuable not only in adults, but also in the treatment of many infectious diseases in children.

Aldiazol-M is available on prescription through all pharmacies. Write for literature.

THE S. E. MASSENGILL COMPANY
Bristol, Tenn.-Va.
NEW YORK • SAN FRANCISCO • KANSAS CITY

SE Co

Each teaspoonful (5 cc.) of Aldiazol-M provides:

Sulfadiazine (microcrystalline)	0.25 Gm.
Sulfamerazine (microcrystalline)	0.25 Gm.
Sodium Citrate	1.0 Gm.

Aldiazol-M

SEDAMYL

[ACETYLBROMDIETHYLACETYLCARBAMIC SCHENLEY]

helps the patient escape from the psychosomatic maze

in anxiety states

sedation without hypnosis

ideal for daytime use...

SEDAMYL is not a barbiturate. Professional literature and samples on request.

Because SEDAMYL* quickly helps overcome anxiety, apprehension, and nervousness without causing drowsiness, "hangover", or impaired perception, it is considered ideal for low-level daytime sedation. Under the gentle influence of SEDAMYL, the patient feels as though he is having one of his "good" days.

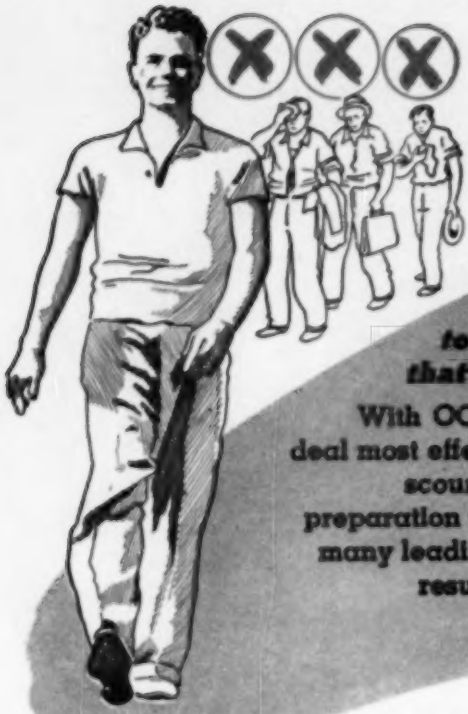
SEDAMYL is quickly absorbed, affording rapid and full response. Readily metabolized, it is well tolerated in therapeutic doses and does not produce undesirable circulatory or respiratory effects.

SUPPLIED: Tubes containing 20 tablets; bottles containing 100 tablets; each tablet provides 0.26 Gm. (4 gr.) of acetylbromdiethylacetylcarbamid.

SCHENLEY LABORATORIES, INC., 350 Fifth Ave., New York 1

Schenley Laboratories, Inc.

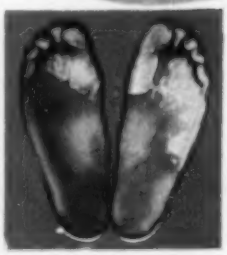
*Trademark of Schenley Laboratories, Inc.



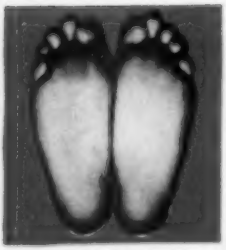
SUMMER

3 out of 4 are bound to catch athlete's foot*— that's summer's usual toll!

With OCTOFEN, you're ready to deal most effectively with this summer scourge—for OCTOFEN is the preparation that's won the acclaim of many leading specialists for brilliant results in many clinical tests.



BEFORE
Athlete's foot 12 years' duration.



AFTER
Clear after 3 months' of treatment.

1½ & 4 Ounce Bottles For Your Rx Convenience

*Mod. Med. Topics, 10:7, July, 1949

The Superiority of Octofen is measured in feet

brings out the WORST in feet

Be ready with Octofen® A TRUE FUNGICIDE!

To help wind up the case as quickly and safely as possible, remember these vital facts about OCTOFEN:

Octofen

- Kills fungi on contact.
- Has cleared up some cases of athlete's foot in as short a time as 1 week.
- Has shown no primary irritation or sensitization in clinical work to date.
- Reduces or even eliminates danger of overtreatment dermatitis.
- Free from irritants, heavy metals, tars, oils, phenols or alkalies.
- Potent, nonirritating, greaseless.

Let OCTOFEN prove itself without obligation or expense!

successfully treated!

McKESSON & ROBBINS, INCORPORATED Dept. M.T.
Bridgeport 9, Conn.

Gentlemen:
Please send me free a clinical sample of OCTOFEN—sufficient to test its efficacy—and descriptive literature.

Name_____ M.D.

Address_____

City & State_____

MODERN MEDICINALS

Physicians will find that these brief resumes of essential information relative to the newer products are so prepared that they may be removed and pasted on standard 3 x 5" file cards, and filed for ready reference.

9-50

Valoctin

MANUFACTURER: Bilhuber-Knoll Corporation, Orange, N. J.

INDICATIONS: As a sedative and antispasmodic in smooth muscle spasm complicated by nervous tension and pain as in vesical and ureteral colic, biliary colic and irritable colon. It has proved helpful in the spastic type of dysmenorrhea and in tension and migraine headaches.

ACTIVE CONSTITUENTS: Tablets, each containing 1 grain (60 mg.) Octin and 4 grains (250 mg.) Bromural.

DOSAGE: Orally, one or two tablets at onset of distress. One additional tablet may be taken after four hours, if necessary. Transient dizziness and lassitude may occur in the occasional sensitive patient, but generally in such cases Valoctin can be continued in reduced doses.

HOW SUPPLIED: In bottles of 100, 500, and 1000 tablets.

9-50

Neovacagen

MANUFACTURER: Sharp and Dohme, Inc., 640 North Broad St., Philadelphia 1, Pa.

INDICATIONS: To stimulate specific immunity against secondary bacterial invaders in respiratory infections.

ACTIVE CONSTITUENTS: Each tablet contains 25 mg. of methapyrilene hydrochloride together with the soluble antigenic substances of approximately 100,000 million bacteria usually associated with infections of the respiratory tract.

DOSAGE: Adjusted to the individual, may vary from 1 to 3 tablets daily during the period in which upper respiratory tract infections are present.

HOW SUPPLIED: In bottles of 20 and 100 tablets.

9-50

Glybrom

MANUFACTURER: The E. L. Patch Company, Stoneham, Mass.

INDICATIONS: For the prophylactic and therapeutic treatment of premenstrual tension and motion sickness.

ACTIVE CONSTITUENTS: Each yellow, uncoated tablet contains: Pyrabrom, 50 mg.

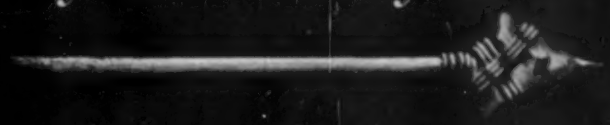
DOSAGE: In premenstrual tension: 1 tablet three times a day beginning three to five days before the expected menstruation. Should side effects such as drowsiness or dizziness appear, reduce dosage. Discontinue on appearance of the menstrual flow. Dosage should be limited to a total of three tablets per day for a period not exceeding one week.

In Motion Sickness: 1 to 2 tablets 30 minutes to 1 hour before beginning of the journey, and 1 to 2 tablets, if needed, every three or four hours. Dosage should be limited to a total of six tablets per day for a period not exceeding one week.

HOW SUPPLIED: In bottles of 100 tablets.

—Continued on page 42a

Quickly and surely



attack the Attack

For the asthmatic or cardiac patient, AMINET Suppositories present definite advantages over ordinary aminophylline suppositories:

The unique Bischoff base (without cocoa butter) prevents inactivation of the active ingredients and favors more rapid absorption. Potency is protected and stability is assured.

AMINET® *Suppositories*

are always therapeutically fresh and melt at body temperature

The combination of aminophylline and pentobarbital sodium, readily absorbed by rectum, quickly relaxes the bronchi, calms the patient and allays anxiety and apprehension. Relief—in a matter of minutes—is prompt with AMINET Suppositories, and is prolonged for hours. Response is excellent, even in epinephrine-fast patients.

Since AMINET Suppositories are easily administered by the patient himself at the first indication of an impending attack, they are highly useful in acute bronchial asthma, as well as seasonal asthma, cardiac asthma (paroxysmal nocturnal dyspnea) and Cheyne-Stokes respiration. Tolerance to AMINET Suppositories is greater than to aminophylline injections.

AMINET Suppositories are available in:

Full Strength containing Aminophylline 0.5 Gm. (gr. 7½) and Pentobarbital Sodium 0.1 Gm. (gr. 1½)

Half Strength containing Aminophylline 0.25 Gm. (gr. 3¾) and Pentobarbital Sodium 0.05 Gm. (gr. ¾)

Benzocaine has been added for its anesthetic effect.

Bischoff ERNST BISCHOFF COMPANY, INC. STAMFORD, CONN.

—Continued from page 40a

Eskel

9-50

MANUFACTURER: Smith, Kline and French Laboratories, 1530 Spring Garden St., Philadelphia 1, Pa.

INDICATIONS: For the prophylaxis and treatment of angina pectoris and bronchial asthma.

ACTIVE CONSTITUENTS: Each tablet contains a mixture of active principles, chiefly khellin, extracted from the plant *Ammi visnaga*, equivalent to 40 mg. of crystalline khellin.

DOSAGE: Initial (khellinization)—One tablet (40 mg.) 3 times daily after meals. In a few cases, 4 times daily. Maintenance—to be determined individually. Ordinarily, 3 tablets daily. Side Reactions: Anorexia, nausea, and dizziness are not infrequent but are not dangerous and can be controlled by careful regulation of dosage.

HOW SUPPLIED: In bottles of 50 tablets.

Ammivin

9-50

MANUFACTURER: The National Drug Company, Philadelphia 44, Pa.

INDICATIONS: In angina pectoris, in the treatment of acute or chronic coronary insufficiency, and for the relief of spasm of the collateral vessels. Since it has no effect on the systemic blood pressure, it can be administered safely when hypertension complicates the anginal syndrome. Also valuable for patients with bronchial asthma.

ACTIVE CONSTITUENTS: Pure crystalline khellin, unadulterated by visnagin or other undesirable plant constituents of *Ammi visnaga*, the source material.

DOSAGE: Tablets, 20 mg.: 2 to 3 tablets after each meal. Response to treatment is usually apparent within 3 to 5 days in mild or moderate cases; after 7 to 10 days in severe cases. Optimal improvement may be expected after two weeks of treatment. When improvement is obtained, a maintenance dose of 40 mg. to 100 mg., or even more, according to the severity of the case, can be given for a prolonged period, if deemed necessary, without any untoward effects. Since Ammivin has a cumulative effect, dosage should be adjusted according to the needs of the individual patient and his response to therapy.

HOW SUPPLIED: Tablets, 20 mg., enteric coated, bottles of 40 and 100.

Nupercainal Cream

9-50

MANUFACTURER: Ciba Pharmaceutical Products, Inc., Summit, N. J.

INDICATIONS: Provides immediate and prolonged relief from the pain of sunburn, minor burns and abrasions.

ACTIVE CONSTITUENT: Water-washable base containing 0.5 per cent Nupercaine (brand of dibucaine).

DOSAGE: Applied to the skin liberally and with gentle rubbing will be absorbed into the tissue.

HOW SUPPLIED: Tubes of 1 ounce.

Nembutal and Belladonna Elixir

9-50

MANUFACTURER: Abbott Laboratories, North Chicago, Ill.

INDICATIONS: For the treatment of hyperactivity, functional or organic, of the gastric cardia, pylorus, bile duct, colon or ureter. May be used to obtain symptomatic relief in peptic ulcer, colitis, biliary spasm and other conditions characterized by spasmodic abdominal pain. Nembutal relieves psychic tensions; belladonna alleviates spasm and diminishes the secretion of hydrochloric acid.

ACTIVE CONSTITUENTS: Each teaspoonful represents Nembutal sodium 15 mg. (¼ gr.) and extract of belladonna 10 mg. (1/6 gr.). Compatible with codeine phosphate, codeine sulfate, papaverine hydrochloride, chloral hydrate, Vi-Daylin, Methadone syrup, Surples ferrous, Duozine suspension and other preparations.

DOSAGE: As indicated.

HOW SUPPLIED: In 1-pint and 1-gallon bottles.

years of constipation corrected in days

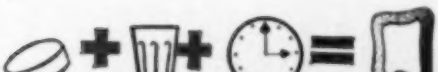
Bargen reports "a large number of patients"[1] with obstinate constipation "happily" and physiologically corrected with Cellothyl.

> **"These patients were not afflicted with any ordinary form of constipation, for they had taken large quantities or as some of them said 'barrels of laxatives' of one kind or another. The results achieved are all the more striking because the patients . . . felt that there was no hope for the relief of their obstinate constipation."**

In cases of "obstinate constipation of long duration"[1]—even from early childhood—a striking change for the better followed administration of Cellothyl.

In a physiologic manner: **Cellothyl follows the normal physiologic gradient from mouth to rectum, providing bulk where bulk is needed —in the colon. Bargen demonstrated through the use of operative stomata that Cellothyl passes through the stomach in liquid form, then through the intestines as a more viscous fluid forming soft, moist bulk in the colon.**

1. "A Method of Improving Function of the Bowel": J. Arnold Bargen, M.D., Division of Medicine, Mayo Clinic, Rochester, Minnesota, in Gastroenterology, 13:275 (Oct.) 1949.



Cellothyl®

(brand of methylcellulose)

especially prepared

CHILCOTT

Laboratories DIVISION OF **The Maltine Company**

MORRIS PLAINS, NEW JERSEY

Patient under Treatment

FOR CHRONIC URINARY

TRACT INFECTION

ENJOYS

Gratifying Relief

from distressing symptoms

The action of orally administered Pyridium often enables patients to carry on without interruption of normal pursuits throughout the course of specific treatment of uncomplicated prostatitis, cystitis, urethritis, and pyelonephritis.

This effective urinary analgesic relieves distressing symptoms such as urinary frequency and pain and burning on urination, without systemic sedation or narcotic action.

Pyridium is the trade-mark of Nepera Chemical Co., Inc., successor to Pyridium Corporation, for its brand of phenylazo-diamino-pyridine HCl. Merck & Co., Inc. sole distributor in the United States.

The complete story of Pyridium and its clinical uses is available upon request.

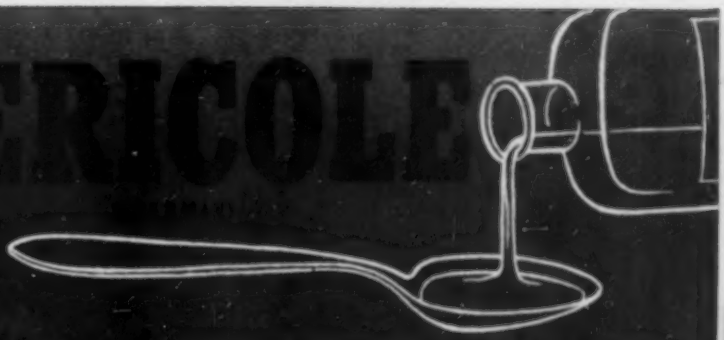
Pyridium®

(Brand of phenylazo-diamino-pyridine HCl)

MERCK & CO., INC. *Manufacturing Chemists* RAHWAY, NEW JERSEY

In Canada: Merck & Co. Limited—Montreal, Que.

GERICOLE



IN FAULTY FAT METABOLISM OF THE HEART • LIVER AND KIDNEYS

FOR GERIATRICS • PEDIATRICS AND GENERAL PRACTICE

GERICOLE contains, in addition to the water-soluble vitamins, the two lipotropic agents choline and inositol. This makes it the logical medicament to prevent or correct fatty degenerative changes that frequently occur in surgical patients[1], during pregnancy[2], cirrhosis[3], chronic hepatitis[4], and in other conditions in which the diet may be inadequate[1].

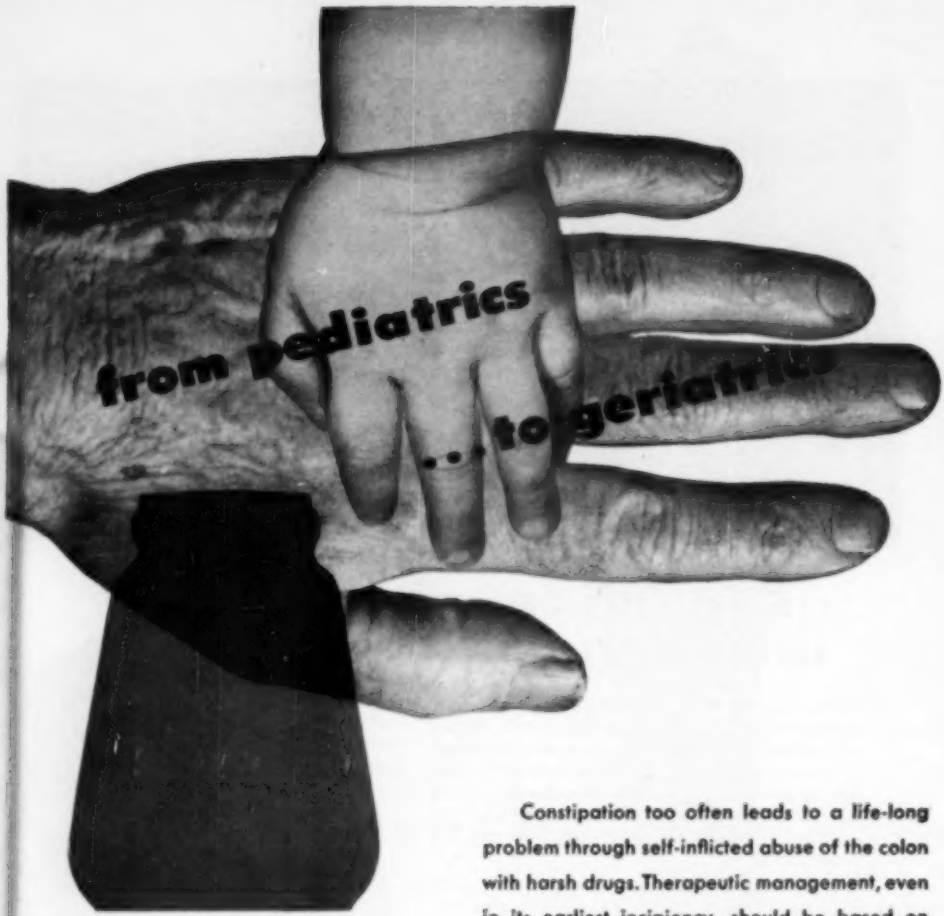
The GERICOLE base is a specially developed, delicious tasting, orange flavored, non-alcoholic syrup.

Dosage is easily varied for infants, children and elderly patients to provide massive, therapeutic, or supplementary amounts of vitamins and lipotropics.

(1) Varco, R. L.: Surgery, 19:304 (March) 1946 "... the fatty liver ..., is unquestionably of great prognostic significance." (2) Philpott, N. W., et al.: Am. J. Obst. & Gynec., 57:125 (Jan.) 1949. (3) Editorial: Ann. Int. Med., 22:615 (April) 1945. (4) Best, C. H., Mac Lean, D. L., and Ridout, J. H.: J. Physiol., 83:275 (Feb. 9) 1935. (5) Cohnheim, J.: The New Sydenham Society London (1889).

SHERMAN LABORATORIES
G. H. Sherman, M. D., Founder
BIOLOGICALS • PHARMACEUTICALS
DETROIT 13, MICHIGAN

A booklet with complete clinical data is available to physicians on request.



Constipation too often leads to a life-long problem through self-inflicted abuse of the colon with harsh drugs. Therapeutic management, even in its earliest incipiency, should be based on measures which neither disrupt normal bowel physiology nor favor cathartic addiction.

Zymenol is effective in preventing, as well as breaking, the cathartic habit. Zymenol promotes normal bowel function without purgation, without irritation and without the risk of fecal impaction. Zymenol is safe. Zymenol is mild. Zymenol is non-habit forming (the dose can be consistently reduced). Moreover, Zymenol is effective.

Zymenol is a colloidal emulsion of a special aqueous culture of Brewers Yeast (no live cells), with mineral oil as the lipid phase. Write for FREE 14 oz. ($1.25) trade package for your professional use.

Zymenol®

AN EMULSION WITH BREWERS YEAST

OTIS E. GLIDDEN & CO., INC., Waukesha, Wis.

FOR EFFECTIVE BOWEL MANAGEMENT

Nupercainal Ointment

for prompt and prolonged relief of local pain and itching

NUPERCAINAL OINTMENT is indicated in Hemorrhoids, Anal Fissures, Pruritus Ani, Pruritus Vulvae, Fissured Nipples, Burns, Intertrigo, Decubitus, and Nasal Furuncles.

NUPERCAINAL OINTMENT contains 1% Nupercaine (dibucaine) in a base of lanolin and petrolatum available in 1 oz. tubes with applicator and 1 lb. jars.

Ciba PHARMACEUTICAL PRODUCTS, INC., SUMMIT, NEW JERSEY

NUPERCAINAL® NUPERCAINE® (brand of dibucaine) 8/1864M

LETTERS TO THE EDITORS

—Continued from page 34a

time to this high figure. At that time we would indeed have 'Socialized Medicine' and the government would undoubtedly have to take over all the private hospitals in the country in order to assure hospitalization facilities for all veterans."

Charles S. Flynn, M.D.,
Bluefield Sanitarium,
Bluefield, W. Va.

SOCIALIZED MEDICINE

"No socialized medicine should ever be in effect in this great U.S.A."

W. H. Campbell, M.D.,
Chickasha, Okla.

LIKE MT

"I look for Medical Times most eagerly. It is an immensely useful and practical magazine."

E. K. Chambers, M.D.,
San Francisco, Calif.

"Just a note of thanks for Medical Times—a top journal for the busy GP like myself. Keep up with the timely, meaty articles and tips."

Sterling H. Huntington, M.D.,
Burlington, N. C.

REPRINTS

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*PB abbreviated designation for phenobarbital.

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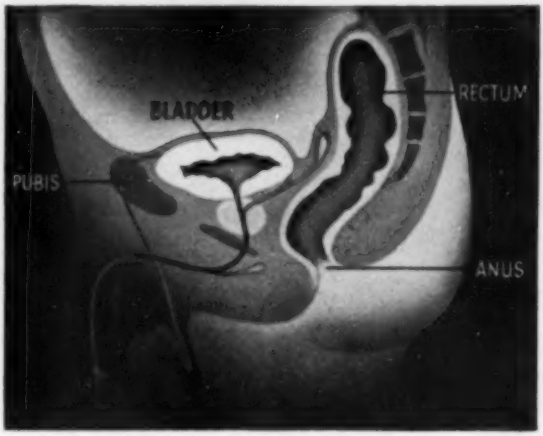
Proximity of Bladder to Rectum is considered important factor in success of *Thalexyl* capsules against urinary infections. *Sulfathalidine* component eliminates source of infection from bowel, and its bacteriostatic action may block escape of organisms into urinary tract. Hexylresorcinol relieves pain rapidly, exerts pronounced antiseptic action against wide range of organisms.



Prompt Relief. When *Thalexyl* capsules are administered in acute and chronic urinary tract infections, pain and discomfort are quickly relieved, and the urine usually becomes clear and sparkling within one week. The recommended dosage for adults is 4 *Thalexyl* capsules three times daily (a total of 6.0 Gm. of *Sulfathalidine* and 1.2 Gm. of hexylresorcinol). In children 6 to 12 years of age, 3 *Thalexyl* capsules may be given thrice daily (4.5 Gm. of *Sulfathalidine* and 0.9 Gm. of hexylresorcinol). Medication should be continued for three weeks, regardless of symptomatic and bacteriologic improvement, to reduce to a minimum the possibility of recurrence.

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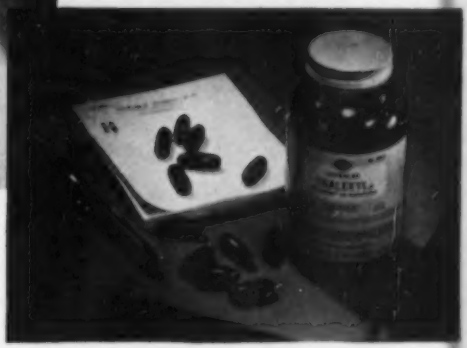

Clear, Sparkling Urine is usually obtained within one week after the beginning of *Thalexyl* therapy. Results are due to double antibacterial action of *Sulfathalidine* in the lower bowel and hexylresorcinol in the urinary tract, where the latter also exerts a pronounced analgesic effect, bringing relief from vesical irritability, burning, frequency, and tenesmus.

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Doctor! How Can I Lose Weight?

ADOLPH L. NATENSHON, M.D.
Milwaukee, Wis.

This question is becoming common and is being asked more often. It is one which is worth much more than sixty-four dollars to the physician, but too few of us ever stop to realize its importance.

Insurance companies, for a long time, have realized the dangers of too much weight, and encourage a person around forty to be underweight rather than overweight. Their mortality tables have proven that the span of life is not nearly as long in the overweight individual. One very seldom sees a heavy individual live to a ripe old age, but the thin, dried-up person, whom a good wind could blow away, is the type that lives the longest. In spite of all the propaganda by insurance companies and ethical drug concerns encouraging people to consult their physicians before attempting weight reduction, nothing is being done for these people, and they are being sloughed off by the doctor.

Nobody seems to care about the obese person. Private hospitals do not have bed space; the sanitarium doesn't want them, and most people cannot afford taking all of their meals from a diet kitchen, as at the Mayo Clinic. This type of patient is ambulatory, so he is told he appears fat and healthy, or he is sent away with "You're fat and good natured." The obese patient is far from healthy, and every one of them is a potential patient. Years ago, in a Vienna tuberculosis clinic, I was surprised at the number of robust, heavy, ruddy-complexioned individuals who appeared a picture of health, but were in the terminal stages of the disease.

What is happening to these people who are being neglected by the physician? They go to quacks, go on ridiculous diets, buy worthless and harmful preparations and weight reduction aids. Billions of dollars are spent each year on self-medications which are being diverted from the medical profession, billions which, if spent properly, would result in a healthier nation and would cut down on needless suffering and unnecessary death.

We, as physicians, are partly responsible for this existing condition. Many of us feel we are too busy with other phases of medicine to realize how integral a part dietetics and weight reduction play in our practice, especially in general practice. Later, in this paper, I will attempt to show how important weight reduction is from babyhood on through late life. It is true that we are not entirely to blame for our lack of knowledge in this field, because a weakness exists in our medical education. Very few schools today give adequate work in applied dietetics, pharmacology, prescription writing and therapeutics. Very few articles are written on these subjects, and those that are are much too technical to be put into practical usage.

It is with this thought in mind that I have written this article, with the hope the

reader may carry away some facts and information which may be of value in practice. It represents a study of at least a thousand cases from my own practice, over a ten-year period, and the facts I have gathered from this material.

Some of my readers may resent the fact that I, a general practitioner, am giving this paper instead of a specialist, a professor, or somebody tied up with a large teaching institution or clinic. I do hold the lowest rank at the hospital where I do my work, but still I do not feel bad, because I know the Academy of General Practice, growing at the rapid rate it is, will get staff recognition for the general man in the near future.

Many of the treatments and methods taught are fine in large medical centers and institutions where they have plenty of equipment and trained personnel, but they are worthless to the man in general practice in a rural community, or in a large city where hospitalization is a problem. My problems are his problems, and his work has been done in my office on patients just like those he sees in his office every day in the week.

One seldom stops to realize how often a knowledge of dietetics and weight reduction come into play in the field of general practice.

The infant who is fed on evaporated milk with inadequate amounts of vitamins, who becomes very fat and pudgy, is far from a healthy, normal baby. The overfed child, from infancy on, becomes very obese because the mother compares her child with the next door neighbor's and develops bad eating habits by stuffing her child like a "Watertown Goose." The patient tells the doctor it is heredity, for in his family everyone is fat. I doubt very much if this obesity is hereditary, but I do feel this overstuffing and overeating may be a habit which is handed down.

Then consider the pre-adolescent child, the period when boys and girls are very much alike. Many times a diagnosis of Froehlich's syndrome is made in a boy, only to find that after he reaches maturity without any treatment, the symptoms disappear and the child is normal like any other child. There are many boys and girls in the teen age group who do remain heavy.

The problem of clothing these children comes into play with the result clothes must be made to order for the boy at a greater cost because stores don't stock the larger sizes. The boy must wear adult styles, with the result he is "kidded" by his companions because he is wearing his father's suit. This boy is called "fatty," hates to take gym because he is ashamed to undress in front of the others. He can't run and play like the other boys, so, naturally, he becomes a problem.

The high school girl, whose mother has to sew her clothes, and who must wear more matronly styles, soon finds herself out of things because the boys don't date the fat girls. Then, these problems arise in the girls who are overweight: they have irregular periods, dysmenorrhea and sometime profuse periods with long, excessive flow, with resulting anemias.

Some of these girls are unfortunate to have hirsutism on their faces or bodies. Many are forced to shave daily, and appear much older and more matronly than normal, with the result they feel they will never be sought in marriage. So, they keep on eating more and become definite psychologic problems. The physician can salvage many of them by reducing their weight and sending them to qualified people who do electrolysis for the removal of hair. If done properly, with frequent treatments, the hair does not regrow, and there is no scarring of the skin.

A girl, who presented such a problem, came to me after surgery for a possible adrenal tumor, where nothing was found. After weight reduction and removal of the

hair, this patient was married and has two lovely children.

After marriage, a common problem is the obese sterility case that comes to you. Here weight reduction plays an important part in both male and female. Here you get good results with simple procedures, which I shall discuss later in the paper. Your obstetrical problems will be less serious and fewer complications will result if you hold your patients' weight down, and try to prevent them from gaining over twenty-five pounds during the pregnancy.

Around forty years of age we get patients with the middle age spread. This is the category into which many of us fall. With this period of life comes the hypertensive, the diabetic, gallbladder and dyspepsia patient, the arthritic and low back pain patients. Many patients who are obese will have a definite drop in blood pressure when they reduce, and the blood pressure will stay down when they keep their weight at a proper level.

The diabetic is much easier to control, and one finds that when the obese diabetic loses weight, the amount of insulin used can be cut down and many patients can be carried successfully on diet alone. The patient feels better and many of the complications of the disease can be prevented.

The old saying about gallbladder disease, "Fair, fat and a few children," still holds true as far as the obesity is concerned. Most of these individuals like to eat, and after ingesting a nice fatty evening meal, how often are you called late at night because of an attack. In many instances, because of the gas, bloat and a typical heart rhythm, it is almost impossible to differentiate between an acute coronary attack and a digestive or a gallbladder attack. At least, after these patients reduce and stay on a diet which is low in fat, they feel better and they give their poor abused livers a rest.

Many of the patients who come into the office with low back pains, pains in the knees, legs and arthritic pains, are the obese. Many have curvatures and deformities from away back in their youth as the result of poor posture. They began to have trouble only when they got older and heavier and got some arthritic changes. They then go to their physician. The human spine and skeleton are so constructed as to only support a reasonable amount of weight. Beyond reasonable limits, from a purely mechanical standpoint, the usual things happen in the overweight patient. Something has to give, so the patient develops back pains, pain in the knees, legs, and in other joints. If the excessive weight is improved within a reasonable period of time, before secondary changes in the bones take place, naturally, many of these pains will disappear without any medication.

The menopausal patient, who is putting on weight rapidly, who complains of weakness, tires easily, and who has arthritis of the fingers, is a common visitor to the office. The usual story is that she weighed only ninety pounds when she was married, but she forgets that was forty years ago. This patient, it is true, does in many instances have characteristic anemia, hypertrophic arthritis of the fingers and weight increase—conditions which occur at this period. Much can be done for her, at least to prevent her from getting heavier, even if you are unsuccessful in taking off much weight. She will feel much better, and your results will be better than those obtained with the promiscuous use of estrogenic substances two or three times weekly.

The obese operative patient presents many problems to the physician. Many are very poor operative risks because of the dangers in doing certain procedures on them, with the result one must resort in many instances to other, less effective procedures. Then there is the hard work in doing a simple procedure; the failure of healing , postoperative hernias, and

sometimes evisceration in this type of individual. If one has sufficient time to take off weight before an elective surgical procedure, the results will be better, the mortality will be less and the physician will not have to work nearly so hard.

Now that I have shown how important weight reduction is in everyday practice, I will attempt to show how to reduce these patients.

It is my feeling that most patients are overweight because they eat too much, and that very few of these cases are due to glandular disturbances. In this country of ours, where living standards are higher than any place in the world today, food is plentiful and the amount of carbohydrates consumed per capita is exceptionally high. It is easy to understand why so many people literally "eat themselves into their graves."

There are certain essentials in weight reduction which must be carried out if one expects to get good results. One, is always to have complete control over your patient, and secondly, to refuse to treat any obesity case unless the patient goes through a complete examination by you. The horse and buggy days in medicine are a thing of the past.

With the rapid progress being made in medicine today, it is difficult to be a good general practitioner, and one must keep up by reading or postgraduate work, or he will soon fall by the wayside. This is why the Academy of General Practice requires the renewal of membership every three years, with so many hours of postgraduate work.

A complete examination on every new patient should be a rule in every office. This should include a history, complete physical, urine analysis, blood count, perhaps fluoroscopy of the chest and a basal metabolism. The excuse that a physician hasn't the time is a poor one, especially now with business conditions leveling off, competition getting more keen, and the general trend of patients back to the family doctor. The family physician has the advantage when it comes to diagnosing and treating, because he knows the family situation at home, has the patient's confidence and sees the patient as a human being in his entirety, not as a number or any individual portion or system.

There has been some criticism of physicians in general by various articles in lay magazines, criticizing the physician because a patient sent to ten different men comes back with ten different diagnoses. Some of this criticism is true, and all because of the failure to do a thorough examination on patients.

If one get into the habit of doing complete examinations, more accurate diagnosis is made, treatment is simpler, and the patient makes a more rapid recovery, with the result that the patient is willing to pay better fees and is satisfied. The physician practices a high grade of medicine, and it becomes more fascinating and interesting instead of boring. Many other unexpected conditions are uncovered for further treatment, and patients are retained. The term "pill doctor" should be obsolete. A satisfied public is the best defense we have against socialized medicine. Let us not be like the physician who treated a case of jaundice for fifteen years, until he found out the patient was Chinese.

In weight reduction, thoroughness is important, because otherwise you may get poor results and sometimes disastrous results by the use of aids and drugs, especially in situations where one must proceed with caution. The aim of any procedure in weight reduction is to reduce the intake, and make the individual burn up his excessive fats in the body. The diet, of course, is therefore the basis of all weight reduction. The unfortunate part is that the ordinary individual lacks the will power and will only stop indulging when it is a question of life or death, or when the physician supplies the

will power in the form of medications.

The average person who presents himself will complain of tiredness, shortness of breath on exertion. Some of these may claim nervousness resulting from their tiredness, so from want of something to do they keep on nibbling, adding insult to injury. These obese people usually appear much older their true chronological age; they may have pretty faces, but their chassis!

Is it any wonder they are always tired? If you told a patient to carry around with him a fifty or hundred pound weight, day and night, he would tell you that you were insane. Actually, that is what is happening, and is it any wonder that he tires and develops heart conditions after expending so much energy just to tote this extra burden around day and night, day in and day out. This excess fat tissue requires blood supply, so the body must develop hundreds of feet of blood vessel to nourish this fat, so it is only natural to find anemias in most of these patients.

So, in treating these patients, it is often necessary to give them some iron, or a liver and iron preparation to build up their count. If one doesn't watch their counts, their resistance goes down, they get frequent colds and infections to which they may succumb. If these preparations are given during the course of their meals, one finds they have fewer cramps and abdominal pains, so commonly caused by iron preparations.

For years, atropine, belladonna, and other preparations have been used for curbing the appetite. With the introduction of Amphetamine Sulfate in recent years, a product which was primarily approved for its ephedrine-like action, it was found this drug did curb the appetite. Now there are many preparations on the market which serve the same purpose.

Very often a doctor will tell a patient, "Reducing drugs will produce cataracts and cause blindness. This particular preparation was forced out of use ten years ago." Certainly, all drugs used for weight reduction are dangerous if handled improperly. Any relatively inert substance, like table salt, when given in too large quantities, can injure. If any drug like Amphetamine, Dexedrine, Desoxyephedrine is used properly, there is little danger if one knows these drugs and their actions. I do not advocate the use of mixture of drugs with which the market is flooded. The day of gunshot prescriptions is long past, and it is the business of the physician to use these drugs individually and to combine them as he sees fit for the individual patient.

Most of my work was done with Amphetamine Sulfate, and the results were not nearly so good if I used other amphetamine salts such as the chloride or citrate. For competitive purposes, Dexedrine was brought out because of fewer side effects. However, I like to use Amphetamine Sulfate because of its side effects. The drug does give the patient a boost, a feeling of well being, "pep," and a false stimulation, which is of benefit to the patient who is down in the dumps, the tired anemic individual who needs this stimulation until his blood is back to normal. It gives the alcoholic much more stimulation than alcohol, and sometimes he gets along without his alcohol.

The patient is instructed to use the ten milligram scored tablet starting with a half tablet at breakfast and noon time, and not to take it after 2:00 P.M. His mouth may get dry, but he may drink as much water as he desires. He should be able to go from one meal to another without getting hungry, and to go away from the table satisfied with the amount of food called for in his diet. If he cannot get these results, he may increase the amount as high as one tablet in the morning and one tablet at noon time. It is not necessary to increase the dosage beyond two tablets or twenty milligrams daily, because the results will be no better. If the patient takes the drug too close to

bedtime, he may be wide awake at bedtime and have difficulty in falling asleep. There are some individuals who get hungry after supper, whom the drug does not keep awake. One can give them one half tablet in the morning, a whole tablet at noon, and a half tablet at four in the afternoon. When the patient is first started on this medication, observe him closely because there are certain individuals who cannot tolerate the drug, in which case stop it at once. If the patient won't tolerate Amphetamine Sulfate, he usually won't tolerate similar drugs.

A few individuals developed neuritis, and one developed a painful heel condition which disappeared after the discontinuation of the drug. Do not use the drug in the case of cardiacs, diabetics, severe hypertensives or a patient sensitive to ephedrine-like substances. It is true that Amphetamine Sulfate will raise the blood pressure, but I have yet to see the drug do this when used in amounts not exceeding twenty milligrams daily.

A common complaint in the woman patient will be that when she is menstruating she craves sweets and the tablets do not curb her appetite. A hypoglycemia seems to develop at this time, and no matter how much drug you give, it will have little effect. After the period is over, the patient will go back on her usual amount of drug with the usual effects. In this type of patient, water balance plays an important part, and it is known that during menstruation and after the period, there may be a difference of several pounds in weight. They may get headaches, "bloat," have pelvic congestion of the vessels, become quite nervous and have swelling of the legs. Ammonium chloride tablets, enteric-coated, in a dosage of 7½ grains to 15 grains, three times daily, starting ten to fifteen days before the expected period, may relieve the symptoms and aid in weight reduction.

Many of these obese people are actually waterlogged, so sometimes results can be obtained not by reducing the amount of water they drink, but by cutting down on the amount of salt in the diet.

In some instances it is permissible to use salt substitutes, such as Neocurtasal, but be sure the salt substitute is an approved one which contains no lithium or sodium. However, in the summer time, when the weather is hot, and they perspire freely, do not forget to give the patient sufficient salt in the diet, or he will develop heat cramps or even heat exhaustion.

If routine basal metabolism tests are done on your patients, you will find many obese patients whose basals are within a range of a minus ten to a plus five. Many of these patients eat very little and in spite of diet and medications they simply cannot lose weight. Here, thyroid works very effectively. Any good make of desiccated thyroid is usually given in a one-grain tablet, from one to three tablets daily. This drug is not given after supper, because it, too, may keep the patient awake at night. The patient starts with one tablet and increases the amount provided he does not get jittery or his pulse rate does not increase too much. It is easy to have the patient watch the pulse rate and keep you informed from visit to visit. As yet, I have not seen one case of thyrotoxicosis develop in any patient whom I have treated for weight reduction. Thyroid is still one of our best gland products which can be given by mouth with excellent results and with known effects. Its use in sterility, irregular menses, menopausal arthritis, obesity and hypothyroidism still constitutes good therapy.

A good basal metabolism machine in the doctor's office today is almost an essential must. It is just a diagnostic aid and should be used only as such. It certainly will help make diagnoses for you, such as in the common atypical case of hypothyroidism and many other conditions.

If you will observe the Diet List, it is roughly a 1,200 calorie diet. It is divided into three meals, breakfast, luncheon and dinner, or the largest meal of the day. These meals may be changed around to fit the patient's needs. Each meal is divided into groups, each group containing many items with the amounts in household measurements opposite each item. This diet is good because the patient can vary it from day to day, and he doesn't have to eat the same monotonous diet.

This diet can be varied for each individual patient, increasing the amounts by a quarter or half, depending upon his needs; whether or not he leads a sedentary life, is a manual worker or an office worker. This diet is low in fat and carbohydrate, so if you wish to make up for any deficiency in the fat soluble vitamins A and D, a capsule can be given at night before retiring. It has no calorie value and if the patient has eructations from the medications, it will not be noticed by him.

There are other conditions which you will uncover, where it will be necessary to use other medications, such as B-complex, as in neuritis cases. It is necessary to treat these conditions first and build up general body resistance before starting your weight reduction procedures. B-complex may increase the appetite and may defeat your purpose, so use it sparingly.

The Diet is low in bulk, and because the patient is eating less than normal, he may complain of constipation, especially if he is taking an iron preparation. Metamucil, a bulk laxative, will give the necessary bulk and give the patient a large, soft, formed stool. It also gives the patient a feeling of fullness so he does not feel as hungry if it is given before meals. The best way is to give a few teaspoonfuls in a third of a glass of water and follow with juices or water. If mixed in too much water, although tasteless, it is difficult to take.

Sometimes you run into the fat, gallbladder, dyspeptic patient, with whom little can be done. Syrup Choline (Flint & Eaton) is a good preparation which will relieve many of their symptoms and complaints, such as bloating and gas. They are the type of patients in which you find no stones in the gallbladder, but only a poorly functioning gallbladder or perhaps a high blood cholesterol. In some instances, they can eat fat without putting

Low Calorie Diet

BREAKFAST

I FRUITS (Choice of one) Amount

Grapefruit juice	⅔ cup
Lemon juice	⅛ cup
Orange juice	½ cup
Pineapple juice, unsweetened	½ cup
Tomato juice	1½ cups
Grapefruit	½ large or ⅔ cup
Orange	1 medium
Pineapple, fresh, unsweetened	1 cup
Pineapple, canned	1 medium slice
Raspberries, unsweetened	1 cup
Strawberries, unsweetened	1½ cups
Tangerines	3—2" in diameter

II EGGS, MEATS, CEREAL (Choice of one)

(Cooked without fat)

Bacon, very crisp	4 small strips
Brains, scrambled	1 cup
Chicken livers	2 small
Codfish ball	1—1½" in diameter
Egg, poached or boiled	1
Ham, very lean, broiled	1 piece (3x3x1/3)
Trout, broiled	1 small

Cereal with ¼ cup skimmed milk and 1 level teaspoon of sugar:

Corn Flakes	2/3 cup
Rolled Oats, cooked	⅓ cup
Farina, cooked	1/3 cup
Cereal, cooked	1/3 cup
Shredded wheat	1/3 cup
Rice flakes	1/3 cup
Puffed wheat or rice	¾ cup

III BREAD

3 pieces of plain or toasted Ry-Krisp or 1 slice of bread

IV BUTTER

1 pat of butter 3/16x1½x1½
(to be used on bread or the Ry-Krisp or in cooking)

V BEVERAGE (If desired)

Tea, coffee or coffee substitute
(Lemon may be used in tea, if desired.)
If necessary, 1 tablespoon of top milk and 1 level teaspoon of sugar may be used.

on weight, because the preparation is supposed to prevent fatty deposits in the liver.

For the nervous patient, the nibbler, and the patient who gets too keyed up from Amphetamine, Donnatal, given in the dosage of one tablet fifteen minutes before meals, will relax him and put him on an even keel, without making him drowsy.

As far as massage as a reducing aid is concerned, it has helped very little and does nothing more than tone up the patient and make him feel good. It is all right for the rich old lady, at least it does no harm. Exercise may help, but there is always the danger of overindulgence and the potential dangers as a result of exercise.

The patient usually states that she has several children, takes care of her household duties, gets plenty of exercise, but just can't lose weight. Perhaps, one eats more when one exercises and that may at times be the reason for no weight loss.

What results can be expected by using the procedures as outlined in this paper?

At the beginning, the usual patient will lose about four pounds a week, and many of them will lose much more in the first few weeks. Most patients will lose an average of about four pounds a week, but as time goes on, they will find it much more difficult to lose as much. Most of the weight will come off of the abdomen, hips and thighs at the beginning. The patient will lose around the waist line, and he will start getting a waist line. One can see the dividing line for the first time between the abdomen and the chest.

The patient, after a loss of ten pounds, begins to feel fine, has more energy, can bend over and tie his shoe laces, and he

LUNCHEON

I CHEESE, EGGS, MEAT, FISH

(Choice of one) (All should be plainly prepared, without fat)	Amount
American cheese	1 piece (3x2½x¼)
Cottage cheese, dry	½ cup
Clams	¾ cup
Codfish	3 pieces (3x2x½)
Crabmeat	1 scant cup
Eggs, poached or hard or soft cooked	2
Frankfurter	1—4½" long
Liver, broiled	3 pieces (3x2½x¼)
Halibut, broiled or baked	3 pieces (3x2½x½)
Kidneys	2 small or 1 cup
Lobster	1 cup
Oysters	1 cup
Salmon, canned	1/3 cup
Shrimps	2/3 cup
Sweetbreads, broiled	2 or ¾ cup
Tuna fish, fresh	2 pieces (3x2½x¾)
Tuna fish, canned, no oil	½ cup

II VEGETABLES, SALADS

Vegetable plate or salad (Made with any three of the following) 1 generous serving (Serve plain or with lemon, vinegar or mineral oil dressing)

Asparagus	8 stalks—5" long
Beet greens	½ cup
Broccoli	3 stalks—5" long
Cabbage, raw	1 cup
Cabbage, cooked	½ cup
Cauliflower	½ cup
Celery, raw	4 stalks—7" long
Celery, cooked or chopped	½ cup
Cucumbers	12 medium slices
Endive	2 cups
Lettuce	¼ head
Mushrooms	¾ cup
Olives	2 medium
Radishes	10 medium
Sauerkraut	½ cup
Spinach	½ cup
Squash, summer and Italian	½ cup
Tomato, raw	1—2½" in diameter
Tomato, cooked or canned	½ cup
Tomato juice	½ cup
Watercress	5 stalks

One-half serving of any vegetable in Section IV at dinner

III BREAD

3 pieces of plain or toasted Ry-Krisp or 1 or 2 slices of bread

IV BEVERAGE

1 cup of skimmed milk or buttermilk

RECIPE FOR MINERAL OIL FRENCH DRESSING

½ cup light mineral oil
¼ cup vinegar
¼ cup water
¼ cup catsup or chili sauce
½ teaspoon salt
1 teaspoon sugar
1 teaspoon horseradish
1 teaspoon mustard
¼ teaspoon paprika
Clove of garlic
½ teaspoon Worcestershire sauce

Put all ingredients in a screw-top jar and shake well.
Keep in refrigerator. Shake well each time you use.

DINNER

I SOUP (If desired)

	Amount
Clear meat or chicken broth (without fat)	1 cup

II MAIN DISH (choice of one)

(All should be free from visible fat, cooked without fat and served without gravy)

Beef, round steak, broiled	2 pieces (2x3x¾)
Beef, pot roast	3 slices (4x3x½)
Beef, rib roast	3 slices (4x4x¼)
Beef, steak broiled	1 piece (4x3x1)
Beef, corned, very lean	2 slices (4x3x¼)
Beef, fresh tongue	4 medium slices
Beef, hamburger patties, broiled	2—3" in diameter, ½" thick
Chicken, broiled	½ medium
Chicken, roasted or stewed	3 slices (4x3x¼)
Ham, lean, broiled	3 slices (3x3x¼)
Lamb, chops, very lean	2 chops (3x2x¾)
Lamb, roast	1 slice (4x4x¼)
Pork, chops, very lean	1 medium
Squab, broiled	1 whole
Turkey	2 slices (6x3x¼)
Veal, chop, broiled	1 medium
Veal, roast OR	1 slice (3x2x¼)

One serving of any food listed under Section I at Luncheon

III SUBSTANTIAL VEGETABLES

(Choice of one)

Corn	⅓ cup or ½ ear 8" long
Hominy or hominy grits	¼ cup
Lima beans, fresh	1 heaping tablespoon
Macaroni, boiled	¼ cup
Spaghetti, plain boiled	¼ cup
Noodles, boiled	¼ cup
Parsnips, mashed	½ cup
Peas, fresh	1/3 cup
Potato, baked or boiled	½ small
Rice, steamed OR	¼ cup

One serving of any vegetable listed in Section IV

IV GREEN VEGETABLES (Choice of one)

Artichoke	1 medium
Beets	½ cup
Brussels sprouts	3 medium or ½ cup
Carrots	½ cup
Dandelion greens	½ cup
Eggplant	2 slices or 1 cup diced
Green pepper	1 medium
Okra	½ cup
Onions	3 medium or 6 small
Rutabagas	½ cup
String beans	1 cup, scant
Squash, yellow	2/3 cup
Turnips	⅔ cup
Turnip tops OR	2/3 cup

Two servings of vegetables listed under Section II at Luncheon

V SALAD MADE FROM

2 servings of vegetables listed under Section II at Luncheon
OR
1 serving of any vegetable listed under Section IV at Dinner
(Serve plain or with lemon, vinegar or mineral oil dressing)

VI BREAD

	Amount
3 pieces of plain or toasted Ry-Krisp or 1 or 2 slices of bread	

VII BUTTER

1 pat of butter	3/16x1½x1½

(To be used on Ry-Krisp or in cooking)

VIII DESSERTS

(Choice of one)
(Serve without cream, sugar or any sauce)

Any one fruit listed under Section I at Breakfast OR

Apple	1—2" in diameter
Applesauce, unsweetened	½ cup
Apricots, fresh	4—2½" in diameter
Apricots, dried	6 small halves
Apricots, canned	2 halves
Banana	½ large
Blackberries, unsweetened	1¼ cup
Cantaloupe	½ melon—6" in dia.
Cherries, sour	1 cup
Cherries, sweet	2/3 cup
Dates	3
Figs, fresh	3 medium
Figs, dried	1 large
Grapes	24 medium or ⅝ cup
Honeydew melon	⅝ cup diced
Loganberries, unsweetened	1 cup
Peaches, fresh	1 medium
Peaches, canned	1 small half
Pear, fresh	1—3" long
Pears, canned	1 small half
Plums	3 large
Prunes, raw or unsweetened, stewed	3 1/3 cup
Rhubarb	2/3" slice, 6" in diam.
Watermelon	1 slice or 1 cup diced
Or Occasionally	2/3 cup
Applesnow	¼ cup
Blancmange	1/3 cup
Bread pudding	
Custard, baked or boiled	¼ cup
Jello or Gelatin dessert	⅓ cup
Prune whip	1/3 cup
Sherbet	½ cup
Spanish cream	1 piece (2½x2x2)
Angel food cake	1 piece (1x2x1)
Gingerbread	4—1¾" in diameter
Gingersnaps	3 small
Ladyfingers	3
Vanilla wafers	3

IX BEVERAGES

1 cup of skimmed milk or buttermilk
(May be taken at bedtime if preferred)

X IF DESIRED

Tea, coffee or coffee substitute
(Lemon may be used in the tea, if desired. If necessary, 1 tablespoon of top milk and 1 level teaspoon of sugar may be used).

feels like a new individual. The average woman will appear much younger and more youthful and can boast about wearing a much smaller dress size, a thing which is very important to the average woman. The average patient, realizing how good she feels, will watch her weight from then on and will not allow herself to revert back to the previous condition.

There are, of course, some individuals who may drift away, but they will come back to you and start all over again, realizing it isn't good to be fat.

As to habit formation from Amphetamine, I haven't seen it. The certain type of individual who becomes the habitual user of drugs, like barbiturates and Bromo-Seltzer, is not an average normal individual.

I hope I have helped you answer the Question, "Doctor, How Can I Lose Weight?" In conclusion, I hope you don't become too thorough in your examination of patients as this Doctor did—

An actor came to the city and developed a tickling in the throat, so he went to a nose and throat man because he was afraid he might not be able to speak his lines that night. He asked the doctor to give him a tablet to stop the tickling, because otherwise he felt all right. The doctor insisted that he go into an adjoining room and strip to the waist, so he could examine him.

In the other room, the actor sees another man, stark naked. So he said to the naked man:

"What kind of doctor is this? I came in here to get some throat lozenges for a tickling in my throat, and he tells me to strip to the waist."

The other man replied:

"What are you complaining about? I came here to deliver a telegram."

208 East Wisconsin Avenue.

W.H.O. To Sponsor International Syphilis Seminars in Helsinki and Paris

Two international syphilis seminars bringing together American and European specialists will be held next September in Helsinki and Paris, under the auspices of the World Health Organization, to promote the exchange of information on numerous aspects of the prevention, diagnosis and treatment of syphilis.

The agenda of these meetings include the treatment of nervous, early and congenital syphilis, the serodiagnosis of syphilis, technical orientation, laboratories, and antigen production. Participants will review the results of the World Health Organization—United Nations International Children's Emergency Fund campaign against congenital syphilis through penicillotherapy. These campaigns are now under way or in preparation in many countries of Europe, Asia, America and the Eastern Mediterranean.

The Helsinki seminar, to be held from 4 to 10 September, will include from 20 to 25 specialists from Denmark, Iceland, Norway, Sweden, the United States and Finland.

The Paris meeting to be held from 25 September to 7 October will include specialists from Belgium, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, United Kingdom, United States, Switzerland, Yugoslavia and France.

These meetings are also expected to provide useful guidance to workers on early syphilis. Demonstrations on the treatment of early syphilis with penicillin are presently under way with help from the World Health Organization at several university clinics in Europe and North Africa.

Multiple Sclerosis

This summarization attempts to cover the essential therapeutic information on the subject and is designed as a time-saving refresher for the busy practitioner.

Multiple sclerosis, also known as insular sclerosis, sclérose en plaques and disseminated sclerosis, is a disease characterized by lesions of the myelin sheath of the central nervous system. It may be chronic or acute. The degeneration occurs in multiple areas so that the symptoms are usually diversified. Generally the motor system is the one most affected.

Cruveilhier is believed to be the first to have recognized this disease in 1835. In 1837 it was described also by Carswell, a medical student in London. The symptomatology was first described somewhat tentatively by Valentiner in 1856. It was not until 1862, however, that the syndrome was clarified and the chief symptoms established as typical.

Incidence Multiple sclerosis occurs chiefly in young adults. Some state that it rarely occurs in persons under 15 or over 35 years of age.[1] Other studies have revealed that symptoms begin in two-thirds of the patients between the ages of 20 and 40 years. The number of cases developing before 10 and after 50 years of age is negligible.[2] The greatest incidence appears to be during the second decade. It commonly occurs in the third, often in the fourth and infrequently in the fifth decade.[3]

In the middle age group, however, the prevalence ratio is greater because the number of living cases increases. The number of deaths in the older age groups reduces the prevalence ratio in that group since it far exceeds the number of new cases.[4]

Some state that multiple sclerosis is more common in females than in males[5] whereas others believe it affects both sexes equally.[3] Race and occupation appear to have no influence on its incidence. Both Negroes and Chinese have been reported as having the disease. However, it is rarely found in the tropics and some include China in this classification. The extreme southern areas of the United States have a very low rate of incidence. A recent statistical study of the mortality and morbidity rates in the United States and 13 other countries has revealed that the crude death rate increases as the climate becomes colder or the distance from the equator is increased. The countries having the highest mortality rates with the exception of northern Europe are Canada, the United States and Australia. This only assumes significance when other variable factors are overlooked. These include diagnostic ability of physicians, facilities for medical care, medical training, number of physicians in an area, nomenclature and accurate reporting of deaths.

From 1914 to 1921 the incidence of

multiple sclerosis in the United States was approximately 1.1 per cent of all cases having neurological disease.[7] This incidence his increased to an estimated 3 per cent according to some authorities.[3] Others consider the prevalence in the United States to be about 35 to 64 per 100,000 of population.[5,6] Still others estimate that 50,000 to 100,000 people and possibly more have multiple sclerosis.[4] Since the disease occurs in such a restricted age group of the population and a group which is normally highly productive the incidence rate assumes economic significance.

Etiology The cause of multiple sclerosis is still unknown. Although various theories have been expounded it has never been possible to determine any one specific cause in an individual case. Various organisms have been held responsible at times. Metallic poisonings, traumatism and climate also have been considered. Because of its unknown etiology it has never been possible to reproduce in animals the disease as it occurs in humans.

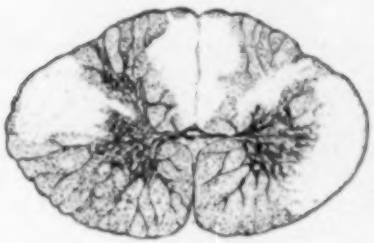
1. Early sketches of sclerotic patches in primary multiple sclerosis. A. Carswell 1838. B. Cruveilhier 1840.

Of all the theories advanced over the years the following have been selected as being the most logical and supported by the greatest background of data: (a) The lesions are caused by thrombi in the venules in the nervous system associated with the lesions. This theory was developed as a result of the study which showed that more degeneration of myelin than of axis cylinders occurred when the venous overflow of cortical areas was blocked. An alteration in the coagulation of the blood also appears to have some influence on the appearance of these venular thrombi.[2,3,8] (b) The lesions may be caused by transient and localized vasoconstriction in various areas of the nervous system. These constrictions (observed especially in the retinal vessels) in turn may cause disturbances which are quickly reversible or are irreversible if the degree and duration of constriction are severe.[2,3,9] (c) Allergic hypersensitivity of the nervous tissue resulting from antigen-antibody reactions may manifest itself in this manner.[2,10–16] (d) Emotional disturbances in fairly characteristic and predisposed personality types may result in certain pathophysiologic mechanisms which in turn cause the lesions.[2,17–25]

Precipitating Factors There are a number of factors which may not necessarily cause multiple sclerosis but simply are responsible for precipitating attacks. These factors include the following: (a) colds; (b) contacts with allergens; (c) pregnancy (many times very severe attacks); (d) chilling (occasionally); (e) trauma; (f) surgery; (g) emotional disturbances; (h) fatigue (mental, emotional or physical); and (i) nutritional inadequacy. Because multiple sclerosis patients are in a delicate state of equilibrium many ordinarily harmless occurrences may precipitate an attack. Regression may even follow a lumbar puncture. Although there

is no specific relationship between the incidence of multiple sclerosis and chronic dietary deficiencies patients having a proper diet do better than those on an inadequate diet.[3,24,25,28a]

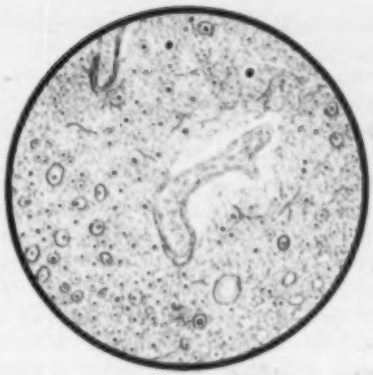
Pathology The macroscopic changes observed are scattered widely throughout the central nervous system with no differentiation between white or gray matter and the special neuron tracts.[1] The lesions appear as degenerative areas. They vary in size and may be sharply circumscribed. Generally, they are perivascular. The lesion usually is swollen and contains fluid in the acute stage. Later the fluid is



2. Areas of sclerosis represented by white spaces seen in a transverse section of the spinal cord.

absorbed and the lesion contracts and hardens.

Microscopic examination reveals disintegration of the myelin sheaths. Large phagocytes absorb the debris. Proliferation of the glia begins and glial scars are formed and gradually the entire lesion becomes a scar. These scars are the sclerotic patches which typify the disease and which Charcot named *sclérose en plaques*. In later stages the axon is affected and dies as a result of pinching of the scar or continued progress of the deteriorating process. The particular lesion involved can no longer recover after the axon is dead. However, this happens quite late since the axons are preserved for some time even though the destruction



3. Histologic appearance of a sclerotic plaque, characterized by proliferated glial cells, a few nerve fibers retaining their myelin sheaths, many naked axis cylinders some of which are hypertrophied, dilated perivascular lymph spaces around the thickened blood vessels, and empty tissue spaces the site of destroyed nerve fibers.

of the myelin sheath is extreme. It is possible that this may account for the remissions which occur for axon function may be restored in the affected lesions after the acute stage has passed. It is also possible that the myelin may be able to reconstitute itself when it is not entirely destroyed.

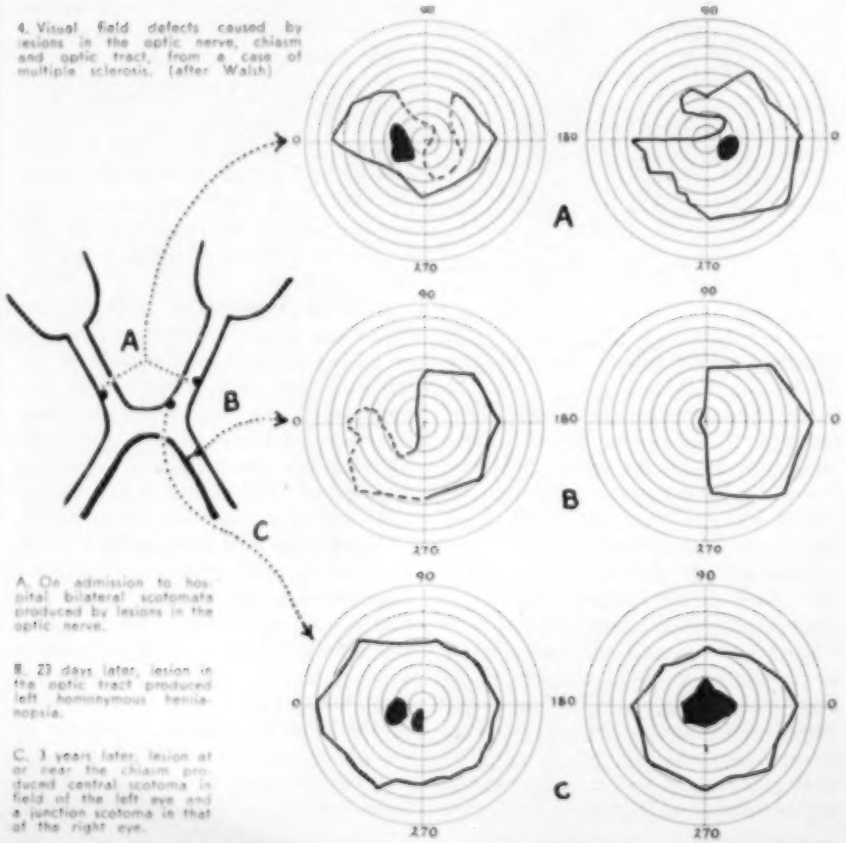
Clinical Types Four clinical types of multiple sclerosis have been described as follows in order of frequency of occurrence: (a) outburst or attacks and remissions; (b) chronic progressive type; (c) stationary type; and (d) acute type. Although this classification is helpful in diagnosis in many cases it is not possible to distinguish any one type so specifically.

Symptoms and Diagnosis Charcot described 3 classic symptoms which have been known as the "Charcot triad." This triad includes nystagmus, scanning speech and intention tremor. However, these 3 symptoms do not always appear in every case. Consequently, they cannot always be employed in diagnosis. However, in the typical cases in which all three do exist they are present to such a degree as to be conclusive. When they are not all

present other symptoms must be carefully considered.

The early symptoms commonly found include disturbances in the ocular muscles which become partially paralyzed and lead to blurred and doubled vision. Numbness and tingling may appear in any part of the body but generally in the hands and feet. Usually they are the first sensory disturbances observed. The following symptoms are generally encountered and are given here in order of importance in diagnosis: fatigue, increase of deep reflexes, nystagmus, ataxic tremor of upper extremities and head, loss of abdominal reflexes, disordered gait and station, disturbances of speech (frequently scanning), pallor of the optic disks on the temporal sides, uncontrolled emotionalism, transitory palsies of ocular nerves, vague sensory disorders, vesical difficulty and mental changes.

Oftentimes one of the first symptoms observed is a tightness around the chest or abdomen. Weakness, paralysis and spasticity particularly of the legs and many times of the arms may develop as a result of effects on the pyramidal pathways.



4. Visual field defects caused by lesions in the optic nerve, chiasm and optic tract, from a case of multiple sclerosis. (after Walsh)

A. On admission to hospital bilateral scotomata produced by lesions in the optic nerve.

B. 23 days later, lesion in the optic tract produced left homonymous hemianopsia.

C. 3 years later, lesion at or near the chiasm produced central scotoma in field of the left eye and a junction scotoma in that of the right eye.

These occur more commonly because of the length of the pyramidal tracts. Ataxia of the extremities and the trunk may occur early in the process due to the effects on the cerebellum and its pathways. However, nystagmus, scanning speech or motor ataxia are less likely to occur because of their limited localization in the cerebellum. The bladder is also affected in various ways during the course of the disease but at first the main signs are urgency, frequency and incontinence. Constipation occurs commonly but rectal incontinence is rare.

Pain seldom occurs in multiple sclerosis. One of the most important characteristics is the tendency for remission.

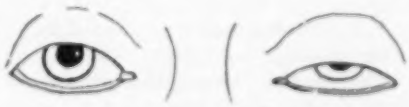
Because of the nature of this disease the symptoms and signs generally do not develop in any particular order. Although the completed form of any one phenomenon requires several days it is possible for it to appear in completed form. Each individual may have a certain grouping of symptoms which constitute a complete attack. The development of this attack may last for 1 or 2 weeks despite the fact that the individual lesions occur abruptly.

Following the first attack the disease may remain stationary or it may develop into the chronic progressive type. Generally, the patient shows improvement and passes into the stage of spontaneous remission. During the remission stage the patient is not considered to have multiple sclerosis since the symptoms at this time are merely residual from the disease condition.

Of some value in diagnosis is the signal symptom which may have appeared years before an acute attack occurs. With urging the patient may remember a brief numbness of some extremities some time previous to the attack but to which he paid no attention. In some individuals this signal symptom is all that ever does occur whereas in others it will be followed later by an attack of multiple sclerosis.

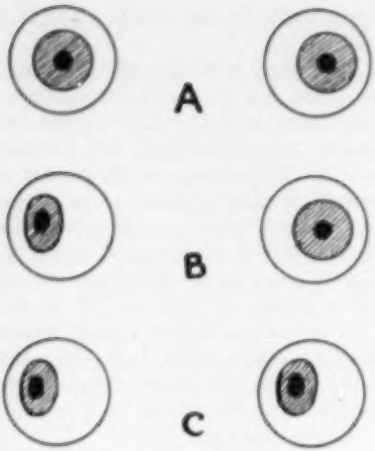
The disease commonly affects the optic nerve and less commonly the balance of the optic pathway. This involvement causes the appearance of scotomata usually affecting one eye. Of greatest interest is the dense central or paracentral scotoma which may appear before other signs. Another type occurs as multiple scattered scotomata which may or may not be fleeting in character. If the optic tract or optic radiations become involved the field defects referable to those areas appear. Like other manifestations of multiple sclerosis there may be a remission in the eye findings.

Diplopia may develop when the lateral rectus or other eye muscles become affected through loss of nerve control. A very annoying symptom is the dissociation of the movements of the two eyes due to lesions in the posterior longitudinal fasciculus. Occasionally oscillopsia is observed and is thought to be a sign of the effects on the cerebellum. Another sign of this dysfunction is nystagmus which frequently occurs.



5. Nuclear ophthalmoplegia.

Nystagmus, scanning speech and ataxia on intended movement are all manifestations of the effects on the cerebellum and its pathways. Any kind of movement may be involved with a tremor. It begins gradually and as the movement nears completion and the finer adjustments in the muscles are necessary the tremor increases. It may involve only the extremities or it may even reach to all parts of the body.



6. Bilateral anterior internuclear paralysis as a result of multiple sclerosis. A. Convergence ability retained when eyes are straight. B. When attempt is made to turn eyes right the left eye fails to turn. C. With caloric stimulation the left eye turns to the right. (after Walsh)

The scanning speech is unpredictable and explosive.

Characteristic lesions also develop in the posterior column resulting in a loss of vibratory and position senses. However, the two senses are not always lost simultaneously.[26,27] Because the position sense is a more discriminative sensation it is more apt to be lost when the lesion is located higher up in the spinal cord.

Unilateral facial paralysis of the peripheral variety occasionally occurs. In rare instances it accompanies abducens paralysis. It resembles in every respect ordinary Bell's palsy and disappears regularly throughout the course of the disease. Trigeminal neuralgia commonly accompanies multiple sclerosis, dysphagia rarely.

Some believe that the patient with multiple sclerosis is very definitely euphoric. However, this is questionable since many such patients have been found to be very depressed. It depends entirely on whether the state of euphoria is considered to be absolute or relative. Most patients have a relative euphoria in that they are not sad, depressed or dejected about their condition. Others, however, are glad to relieve themselves of the responsibility of ordinary life and are only too happy to have someone else responsible for supplying their basic needs. Still other patients with this condition possess the ultimate in determination and will not give in to being considered as invalids.

Light and dark adaptation is frequently impaired. Many patients find they are blinded by bright lights and even by ordinary daylight. In many cases also there is a maladaptation to darkness which is not a typical nyctalopia and cannot be attributed to vitamin A deficiency.

Another sign of advanced multiple sclerosis is the extensive decay of the teeth which is observed occasionally.

It has been reported also that the hydrochloric acid content of the stomach may be decreased or absent in multiple sclerosis.

As the condition progresses further a generalized ataxia develops and the lower and even upper extremities exhibit spastic paralysis. Eventually infections of the urinary tract and decubitus ulcers develop resulting finally in death.[1,3]

Diagnosis and Differential Diagnosis Diagnosis is based chiefly on the signs and symptoms described above.

Although there is no laboratory test which is specific there are certain tests of the blood and cerebrospinal fluid which are helpful. One group maintains that the following five tests should be obligatory: appearance, total and differential cell count, total protein determination, the quantitative colloidal gold reaction and quantitative complement fixation tests.[28]

Cells in the spinal fluid rarely increase to 30 and very rarely beyond that quantity. There may be a slight elevation in protein. In one-third of the cases the colloidal gold curve is usually normal. About

one-third of the cases show a paretic gold curve and another third a syphilitic type.[2]

Multiple sclerosis may be differentiated from syphilis by means of Wassermann or other serological tests. If these reactions are consistently negative syphilis is not present. Without these tests the diagnosis is easily confused because the spinal cord in syphilis may show bilateral pyramidal tract injury which closely resembles Erb's spastic paralysis. This latter condition involves both pyramidal tracts without the presence of syphilis or multiple sclerosis. However, in some instances the signs and symptoms of multiple sclerosis develop later.

Spinal cord tumor is another condition to be differentiated from multiple sclerosis since in some cases of the latter condition the lesion may cut almost across the cord. In this case the disseminated nature of the disease may be obscured because the symptoms are characteristic of a fixed level lesion. Myelography and spinal puncture are necessary for diagnosis. However, in some cases of multiple sclerosis myelography may be positive also. Surgery is indicated immediately if the condition is believed due to a spinal cord tumor so as to avoid, if possible, any permanent damage to the spinal cord. If the myelography is positive but the condition is multiple sclerosis a laminectomy may do no harm anyway.[3]

Encephalomyelitis and multiple sclerosis are easily confused because the lesions in the former are disseminated as well and may develop anywhere in the central nervous system. Encephalomyelitis is believed by some to be caused by a virus whereas others believe it is the same as multiple sclerosis. In some cases diagnosed as encephalomyelitis multiple sclerosis very obviously was the diagnosis later in the course of the disease. For this reason it may not be possible to differentiate between the two. An infection is indicated if there is a marked fever and if there are more than 30 cells in the spinal fluid.

Devic's disease or neuromyelitis optica is characterized by optic nerve atrophy and involvement of the pyramidal tract. It is possible that this is a fulminating form of multiple sclerosis. Pathological examination reveals the presence of infarcts but they do not necessarily preclude the presence of multiple sclerosis. This condition is very severe and the course extremely acute.

Primary anemia may sometimes cause dorsolateral sclerosis in which the dorsal columns and pyramidal tract only are involved. However, this is true also of some cases of multiple sclerosis so that the diagnosis must be made on the examination of the blood. Another aid is the hydrochloric acid content of the stomach.

Amyotrophic lateral sclerosis is another condition which must be differentiated. The pyramidal tract and anterior horn cells are involved in this disease. There is always upper and lower motor neuron involvement. The condition is characterized by increased reflexes, flaccid paralysis, atrophy fibrillations and electrical reaction of degeneration. The pyramidal injury causes hyperreflexia which is still observed because the destruction of the lower motor neuron is not complete. Patients with this disease may survive for a long time but in most cases death occurs more quickly than in multiple sclerosis. In the latter condition the bulbar structures usually are not involved as they are in amyotrophic lateral sclerosis.

In the early stages of multiple sclerosis it may be mistaken for hysteria, particularly if the patient is known to have hysterical tendencies. It is necessary that a detailed examination for neurological signs or symptoms be made since hysteria may be a precipitating factor.

Prognosis Although complete recovery from multiple sclerosis is not usual life is not terminated quickly. Recovery is sometimes simulated because of the tendency to remissions. However, no complete recovery has been reported. Pa-

tients with multiple sclerosis may live an active life for many years. Death ultimately is usually due to decubitus ulcers or urinary tract infections. Various reports state that the average duration of life is 10 to 13 years.[29–33] It is not unusual for the patient to survive 20 to 30 years but longer than 30 years is rare according to some.[7,21–34] In a group of 170 cases survival of 7 for 30 years or more was reported. Of these 3 lived for 30 years and 1 each for 32, 34, 35 and 37 years.[21] In a study of 47 cases 3 patients were reported to have lived 30 years and more after onset of the disease. Of these 3, 1 lived 30 years, 1 lived 31 years and 1 lived 64 years.[29]

Therapy There is no proven specific therapy for multiple sclerosis because its cause is unknown and because of the spontaneous remissions. It is almost impossible to determine whether therapy is responsible for the remission or whether it is spontaneous.

A. Hygiene The patient with multiple sclerosis should exercise extreme care in general hygiene. Recommended are adequate diets supplemented by vitamins. Both bladder and bowel functions should be carefully controlled. All kinds of strain and infection, such as colds, should be avoided. Excessive chilling or overheating of the body also should be avoided. Any dental or other infections should be determined and treated.

B. Physiotherapy Physiotherapy plays an extremely important part in multiple sclerosis. Hydrotherapy, massage, muscle exercises and muscle training help chronic cases to function more efficiently. Re-education is directed toward reducing spasticity and a great improvement in the use of the muscles.

Both neostigmine[35] and curare or *l*-tubocurarine chloride[27, 27a] are of value in treating spasticity. It would appear that the mechanism of action of neostigmine in this direction is not clearly established and its value has been questioned. Neostigmine also has been used along with trimethadione.[27b] Trihexyphenidyl[27c] is another muscle relaxant which has been employed in treating spasticity. One worker has employed the automatic movements so frequently associated with massive spinal cord implication in the interests of useful movement.[23,35] Mephenesin also has been employed to reduce spasticity and improve muscle power. However, the results thus far have been questioned by some. The side effects of syncope, increased ataxia and falling are disadvantages as well.[27d–27j]

For severe reflex spasms, spasticity, pain and paraplegia in flexion, surgery is the method of choice. It may consist of section or alcohol block of lumbosacral motor roots.[2]

C. Psychotherapy It is important that the physician discuss the brighter aspects of the prognosis with the multiple sclerosis patient. If he is in a very severe stage he should be told in such a manner that he will not automatically develop a new attack which might be permanently disabling. The patient's family also can be of help in psychotherapy and the physician should so inform them. In some individuals a psychiatrist may be needed to relieve the patient's anxiety. Psychotherapy must necessarily vary with the individual patient.

D. Avoidance of Precipitating Factors The numerous precipitating factors were discussed previously. Since these factors too vary with the individual it is important that they be determined. The patient should then be instructed to avoid them.

Allergic patients should avoid any contact with the allergens to which they are sensitive. In most cases pregnancy should be avoided. If it does develop it should be terminated as soon as possible in most cases. A few cases have been reported in which pregnancy did not act as a precipitating factor.

Fleeting reduction in vision has some-

times been brought on by hot drinks. This also occurs in some individuals after meals. In such cases wine or other alcoholic liquids (for their vasodilating effect) should be consumed with the meals. A hot hair drier has been reported to have reduced the vision in one case.[9]

Many authorities advise patients with multiple sclerosis to move south of the Mason-Dixon line or if this is not feasible to move there during the coldest season of the year.[23]

E. Dicoumarin Some workers believe that multiple sclerosis patients also have an abnormal clotting mechanism of the blood. This theory is based on the presence of thrombi and other changes in the acute lesions of multiple sclerosis and assumes that the perivascular areas of demyelinization and the scarring which results may be caused by thrombi formation.[6] Consequently it is recommended that dicoumarin be given for an extended period of time in order to avoid exacerbations of the condition.[22] The optimum dosage is based upon regular prothrombin time determinations. A five year study of the use of this drug has shown some favorable results but no definite conclusions have been resolved.[6] There are certain disadvantages. It is necessary to have accurate prothrombin determinations so as to avoid overdosage and consequent hematuria or underdosage and not obtain the desired result. Hematuria or excessive menstrual bleeding has been reported in some cases despite the fact that the prothrombin time was maintained within the optimum range. Little improvement has been observed by some following the use of dicoumarin.[23,38]

F. Antihistamines Diphenhydramine hydrochloride,[39] tripelennamine hydrochloride[40] and antazoline[40a] have shown some value in some cases by their modification of sensitivity to bacterial toxins or other substances to which the patients are susceptible. This is based upon the analogy between the cerebral pathology of the demyelinating disease and that of cerebral anaphylaxis.[23,41] Further study is necessary.

G. Vasodilators Some workers have advanced the theory that the nervous system lesions are caused by vascular disturbances of possible transient nature. The basis for this is the sudden onset of lesions and the extremely transient nature of some signs and symptoms. Included in the group which forms the basis for this theory is the signal symptom, the numerous signs and symptoms appearing over the years and some of the transient reflex phenomena. Various vasodilators have been found to temporarily reduce certain symptoms as well. Thus every transitory or slight induction or exacerbation of symptoms may be considered as an attack. A remission may be considered as every time they are reduced. Consequently remissions would not only result when full circulation was restored in those cases due to impairment of the circulation without a fixed lesion but also in the healing process where the lesions are fixed.[8]

Vasodilator drugs have been shown to eliminate not only the areas of vasospasm of the retinal vessels but also the scotomata responsible. Similar disturbances are believed to occur elsewhere in the central nervous system. Thus vasodilation should be of value in improving the blood supply to the central nervous system.[3, 9]

Various vasodilators have been used for this purpose. Aminophylline U.S.P. is given in doses of 0.1 Gm. 4 times daily; amprotropine phosphate N.N.R. is given in doses up to 1200 mg. daily;[42] and papaverine hydrochloride in doses of 30 mg. every 2 hours. Various combinations of these drugs have been used with doubtful results.[3] However, some report that a fair degree of vasodilation can be maintained by papaverine hydrochloride or amprotropine phosphate in combination with aminophylline and nicotinic acid.[23] Amyl nitrite, belladonna and other such agents

also have been employed. The former and papaverine temporarily eliminate retinal vasospasm and scotomas but for practical purposes they are not considered efficacious.[2,3] In order to follow the theory proposed it would be necessary to maintain active vasodilation 24 hours a day but this is not always possible due to possible side effects resulting from such heavy dosage, necessary because of the short duration of action of these drugs.

Histamine infusions intravenously have also been widely used to improve the blood supply to the central nervous system with good results by some workers;[43] yet others have reported equivocal results.[3] Histamine diphosphate also may be given subcutaneoulsy[22] or by iontophoresis.[42b] Occasionally good effects are obtained but no cures have been reported.[2]

Quinine has been used as well but the results have not been very effective. However, it or carbachol U.S.P. may be useful in controlling bladder symptoms in some cases.[3,44] Scopolamine, santal oil, furfuryltrimethylammonium iodide,[44a] and methyliso-octenylamine[44b] have also been used for this purpose.[3]

Alcohol is also being tested for its value as a vasodilator. In the form of liquor it is given in frequent doses despite the possible development of chronic alcoholism. Unfortunately the harm may result as the patient returns to sobriety or while he abstains from liquor.[3]

Recently a new drug, tetraethylammonium chloride, has been found to relieve vasospasm by blocking the autonomic ganglia.[45] Ambulatory multiple sclerosis patients are given an initial intramuscular injection of 400 mg. of the drug into the upper outer quadrant of the gluteal muscles. The patient is instructed to remain supine for 1 hour. This allows the resulting orthostatic hypotension to decrease so that the patient is able to walk without discomfort. The patient is allowed to leave if no dizziness, nausea, pallor or syncope occur in 5 minutes after he stands erect. He should be warned, however, to sit down immediately if such symptoms develop. Each successive dose is increased over the previous one by 100 mg. until he can no longer tolerate a larger dosage unless the recuperation time is increased. These treatments can be administered 6 times weekly for several months. If gluteal tenderness develops the local application of heat is indicated.[46]

The dosage tolerated varies with the patient. In women patients the dosage has ranged from 400 to 1700 mg. and in men from 700 to 2000 mg. The chronic symptoms of long duration are not affected by tetraethylammonium chloride but prompt remission of acute symptoms due to recent exacerbation of the disease is brought about.

In a group of almost 300 patients treated this therapy appeared to be the best available. Patients with acute relapse showed definite improvement in 3 to 5 days. Although the relapses are not completely cleared or entirely prevented by this drug it does have a definite and beneficial effect on a majority of cases. The non-remissive and steadily progressive type of multiple sclerosis is not affected by any type of therapy.

Like all the other vasodilators the problem with tetraethylammonium chloride is to maintain a more or less permanent vasodilation. Investigations are now being carried out as to whether the effect of several hours duration can be augmented by oral doses of benzazoline hydrochloride.[23,47,48]

H. Circulatory Stimulants Various circulatory stimulants such as ephedrine, caffeine, alcohol, adrenal cortex extract and desoxycorticosterone acetate have been tested as possibilities for relieving the vasoparalysis in the nervous system.[49] The results have been favorable but further investigation is necessary.

1. Vitamins Various vitamin combinations have been tested for their value in treating multiple sclerosis because it was thought that a vitamin deficiency might be responsible. Thiamine, nicotinic acid, ascorbic acid, vitamin E and liver therapy have been given with some favorable results. However, no substantial evidence was given to show that the improvement was due to these drugs.[35,50—53]

Further investigations also are necessary as to the effect of massive doses of vitamin E.[54] The fat soluble vitamins A, D, E and K along with ammonium chloride and increased ingestion of animal fats are also being tried.[50]

Recently, investigations of the possible value of vitamin B_{12} in multiple sclerosis have been started. Given intramuscularly in massive doses of 1000 micrograms daily it produced no definite remission of symptoms. Slight improvement has been observed in patients with the chronic disease when daily doses of 30 micrograms were given for several months. Further studies are being made.[56]

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American College of Chest Physicians

The First International Congress on Diseases of the Chest will be held at the Carlo Forlanini Institute, Rome, Italy, September 17-20, 1950, under the auspices of the council on international Affairs of the American College of Chest Physicians and the Carlo Forlanini Institute, with the patronage of the High Commissioner of Hygiene and Health, Italy, in collaboration with the National Institute of Health and the Italian Federation Against Tuberculosis.

Physicians who are interested in attending the Congress should communicate at once with Dr. Chevalier L. Jackson, Chairman of the Council on International Affairs, American College of Chest Physicians, 500 North Dearborn Street, Chicago, 10, Illinois, U. S. A., or with Professor A. Omodei Zorini, Carlo Forlanini Institute, Rome, Italy.

Cardiac Arrest

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Reports of the successful treatment of cases of cardiac arrest are occurring with increasing frequency. It was felt that a plan or routine should be evolved for the treatment of cardiac arrest since, as Johnson and Kirby state: "It is unlikely that any patient will be saved by a surgeon who has not previously thought out his plan of attack." The treatment of this condition requires, of course, the immediate cooperation of the surgeon and anesthetist and subsequently of the cardiologist, internist and neurologist.

Definition Cardiac arrest is the cessation of cardiac function. In the broad sense we may include cases of ventricular fibrillation in which condition there is, of course, complete disorganization of the heart action. In both conditions there is no longer any cardiac output, no propulsion of the blood stream.

Etiology The causes of cardiac arrest are probably varied. *Anoxia* is often present either due to acute hemorrhage or to chronic anemia or in relation to the induction of the anesthetic. *Reflex changes* form a second important group. These may be in the form of vagal reflexes initiated by traction on viscera or in passing the endotracheal tube. *Loss of blood volume* as in surgical or hemorrhagic shock may cause poor cardiac filling as well as being another cause of anoxia. The direct action of *drugs* can cause cardiac irregularities, cyclopropane being a notorious offender, and an overdose of any anesthetic may of course cause cardiac standstill. A *humoral* etiology may be postulated when adrenalin is liberated by excitement or the action of an anesthetic such as ether. Anoxia deserves special consideration since a patient with cardiac arrest caused by anoxia may already have so much cerebral anoxia that successful cardiac resuscitation is of no avail.

Diagnosis The diagnosis of cardiac arrest will usually be made by the anesthetist who discovers the patient to be pulseless. Almost immediately the skin assumes a marked pallor and mottling, or cyanosis may predominate. The surgeon may quickly confirm the diagnosis by palpation of any of the major arteries or palpatation of the heart through the diaphragm.

Treatment The treatment of cardiac arrest is a real emergency. It is variously estimated from reported cases that to insure complete recovery the circulation and respiration must be restored within three to five minutes. The length of this interval will depend on the previous condition of the patient, whether he has pre-existing heart disease and, most important of all, whether he has suffered long from anoxia. The primary aim in resuscitation is to restore an adequate supply of oxygen to the brain for it is here that irreversible damage will first occur.

Read before the Associated Physicians of Long Island at Westbury, New York, June 13, 1950.

The three components of the oxygen system are the lungs, the circulating blood and the heart. For success it is almost axiomatic that the patient will have to start with good lungs, a good heart and adequate circulating blood volume.

The restoration of respiration offers, of course, no problem. Artificial ventilation of the lungs with 100 per cent oxygen must be started immediately. Manual compression of the breathing bag is a most satisfactory method. For this a closed system is necessary and an endotracheal tube is essential if artificial respiration is to be carried out for any length of time.

The restoration of circulating blood volume is especially important if there has been hemorrhage or surgical shock prior to the cardiac arrest. In these events rapid infusion of blood or blood substitutes must be performed. Even if the circulation volume should be normal just prior to anesthesia and cardiac arrest it has been shown experimentally that cardiac filling and cardiac output increase greatly when intravenous fluids are given rapidly.

Another measure which may be helpful is compression of the aorta, thereby diverting a greater portion of blood flow to the brain. Placing the patient in Trendelenburg position is of value since this increases venous return.

Restoration of cardiac function offers the major problem. Cardiac massage must be instituted immediately. The possible methods of approach are three: subdiaphragmatic, transdiaphragmatic and transthoracic. Effective cardiac massage cannot be performed through the intact diaphragm. It is probably wise, however, if in the abdomen to give the heart a few pushes from below, since this stimulus has on occasion been sufficient.

The second or transdiaphragmatic approach may be carried out by extending the abdominal incision to the xyphoid and entering the diaphragm in the midline. Whether it is preferable to the transthoracic approach in cases of upper abdominal laparotomy is very doubtful.

The third method, an approach directly through the chest, unquestionably gives the most satisfactory results. An incision is rapidly made in the third or fourth interspace from sternum laterally to the midaxillary line. A rib spreader is inserted if available. The cartilages above and below must usually be divided. Cardiac compression is immediately begun.

Another type of transthoracic approach is made by extending an upper abdominal incision across the left costal margin and dividing the diaphragm.

Speed is essential. Painting the skin and draping are not necesary. In cardiac arrest there are, of course, no bleeding vessels to be clamped.

The method of cardiac massage may be compression of the heart against the sternum or by squeezing the heart with one or both hands. The optimum rate of compression advocated in the literature varies from 40 to 120 per minute. Fatigue of the operator, however, makes more than 60 beats per minute impractical.

In addition to the measures discussed above, which are largely mechanical, there are also to be considered several drugs. Epinephrine is a time-honored therapy. Its value, however, is open to question and there is even possibility of harm. In the case of ventricular fibrillation epinephrine would be contraindicated. In cases of cardiac standstill there are probably instances where it is useful. Certainly if the heart is shown to be in standstill we may consider the use of epinephrine to restart the heart. It may be that it is wisest to get an EKG before resorting to this therapy since once cardiac massage is under way there is no hurry about starting a spontaneous heart beat.

Another drug of apparent value is procaine. Injection of procaine into the heart chambers or, with effective massage,

into a vein, is felt to act locally, minimizing harmful reflexes. It has also been demonstrated that this drug may restore abnormal cardiac rhythms to normal. In view of these theoretically favorable considerations and since procaine is felt to be harmless in either fibrillation or in standstill it is probably wise to use procaine as soon as the diagnosis of cardiac arrest is made. This may be by either the intravenous, intracardiac or intrapericardic route.

It cannot be emphasized too strongly at this point that *the important life saving factor* is getting one's hand on the heart in the shortest possible time and that unless procaine is available within a few seconds this part of therapy is best omitted.

As stated above, it is important for all operating room personnel to be "cardiac arrest-conscious" and to have a definite routine or plan to throw into instant operation. The following is a suggested outline for such a plan.

1. Diagnosis: cardiac arrest (anesthetist and surgeon)
2. Record exact time (A)
3. Palpate pulse of major vessel if available. (S)
4. Push heart through diaphragm (S)
5. Artificial respiration. Intubate (A)
6. Procaine intracardiac—5 cc. 1 per cent. (A)
7. Prepare for chest incision to be made within 2 minutes of diagnosis. (S)
8. Start I.V. with large needle—anybody—plus 5 cc. procaine 1 per cent.

It is obvious that in order to accomplish the above result team work between anesthetist and surgeon is required of a degree which is only probable if some such routine has been generally agreed upon and is familiar to all operating personnel.

Case Reports The following are 3 cases of cardiac arrest illustrative of some of the problems related to this condition.

The first patient was an obese white male, 63 years old, who was operated on for bleeding duodenal ulcer. He had had tarry stools four weeks and was bleeding actively for 24 hours preceding operation. Emergency gastric resection was performed and while closing the skin he suddenly became cyanotic and pulseless. The chest was opened through the fourth interspace and the heart found to be in asystole. Cardiac massage was instituted. Artificial respiration with pure oxygen through an endotracheal tube was performed by Dr. Jess Edward. The heartbeat was restored in a few minutes, but was always feeble, and ceased after about 30 minutes.

The second case was a male aged 67 operated on by Dr. John Shell and Dr. Maurice Moore for chronic duodenal ulcer. The patient was a chronic fibrillator. Shortly after opening the abdomen and during the passage of an endotracheal tube by Dr. Edward, the patient suddenly became pulseless and cyanotic. Intravenous procaine was immediately given. Within two minutes or so Dr. Moore opened the chest. The heart was in complete arrest. Massage was immediately instituted. The patient was placed in the Trendelenburg position. Pressure was made on the aorta. The patient's color immediately became pink and within a few minutes vigorous spontaneous cardiac contractions occurred. When the pressure registered over 100 systolic the aorta was released. Spontaneous respiration appeared within 15 minutes. The chest was closed after about one hour. The patient regained consciousness about 9 hours later. His recovery was uneventful. Twelve days postoperatively a partial gastrectomy was performed by Dr. Shell and he has made an uneventful recovery, being discharged on the eighth postoperative day—incidentally still fibrillating.

The third case was a 50-year-old white male undergoing his second midthigh am-

putation for diabetic gangrene. This patient had had a marked anemia preoperatively which had been corrected. He was very depressed mentally and had expressed a wish to die. Spinal anesthesia was given with 120 mg. procaine. While being giving a small dose of pentothal he suddenly became cyanotic and pulseless. The chest was opened within 2 or 3 minutes and cardiac massage instituted. Mask technique was used for artificial respiration and before we were aware of what was happening that patient had a a massive gastric dilatation. An endotracheal tube was then passed and the improvement in color, lung expansion and pulse was noticeable. Resuscitation was successful but he developed hyperthermia and generalized convulsive movements, expiring after 7 hours.

Discussion In reviewing these three cases several important points are illustrated. The first patient obviously suffered from acute and chronic anoxia prior to his arrest. In addition the effect of a three-hour anesthesia caused further cardiac and cerebral depression. We feel that in this case our attempts at resuscitation were applied after too much delay. We have not attempted to record the time factor since it would be too inaccurate and therefore misleading.

The second patient illustrated one of those situations where everything went well. Artificial respiration was started immediately through an endotracheal tube. Cardiac massage was probably begun within 3 minutes. A palpable pulse was obtainable as soon as cardiac massage was begun. It is not certain whether the heart started spontaneous contractions just before or just after intravenous ephedrine. It occurred, however, about 4 minutes after cardiac massage was started. Spontaneous respirations resumed about ten minutes later. Resuscitation in a man of 67 who was a chronic fibrillator and with subsequent uneventful gastrectomy is certainly unusual. The etiology of this arrest may have been a reflex coincident with passage of the edotracheal tube.

The etiology in the third patient may be considered humoral due to liberation of adrenalin caused by his excessive fear reaction. Sodium pentothal may have been a factor with its parasympathetic-like action. The mistake in the resuscitation technique was the failure to immediately pass an endotracheal tube.

Conclusion Cardiac arrest is fortunately a rare complication of surgery. Lives will be saved, however, by the development of a plan of action for such emergencies.

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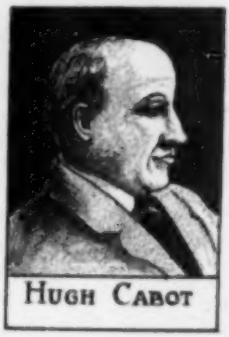

HUGH CABOT

Classical Quotations

● We talk blithely about dilating the ureter. I doubt whether we dilate it very much.

HUGH CABOT

1934 Proceedings of the Interstate Postgraduate Medical Association of North America.

Aphorisms

Truths and Concepts Pertaining to the Blood

ANDREW M. BABEY, M.D.
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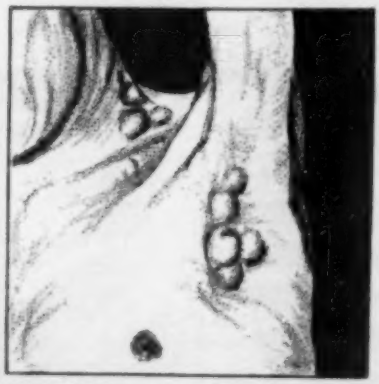
Editor's Note: From a vast field of medical literature Dr. Babey has garnered the most striking findings and the wisdom of a galaxy of experienced clinicians. They are arranged under the following headings: Cardiovascular (with which we opened the series in the April issue), Chest (which appeared in the May issue), Genito-Urinary (which appeared in the June issue, Nervous (which appeared in the July issue), Gastro-Intestinal Tract (which appeared in the August issue), Blood and Thyroid (which we are presenting here), and Miscellaneous. They constitute for the practitioner a comprehensive post-graduate course whose value can hardly be overestimated.

1. "Acute leukemia may be entirely internal—no enlargement of nodes, liver or spleen."—R. Cabot.



Enlargement of nodes in leukemia; when blood changes are marked such enlargement is usually marked.

2. "When a man is near his end from any cause we often have purpuric spots without being able to say why."—Richard Cabot. *Case Records of M.G.H.*, July 3, 1923.

3. "Nothing does any good in acute Leukemia."—Richard Cabot.

4. "Deafness is not uncommon in leukemia from infiltration in internal ear."—Richard Cabot, *Case Records of M.G.H.*, Feb. 6, 1923, #9062.

5. "Long periods of elevation of temperature are common in pernicious anemia, so that I was actually called to a case in consultation which was supposed to be a case of typhoid fever."—Richard Cabot. *Case Records of M.G.H.*, April 24, 1923, #9171.

6. "I have seen cases of pernicious anemia which look like sleeping sickness with coma for weeks."—Richard Cabot. *Case Records of M.G.H.*, April 24, 1923, #9171.

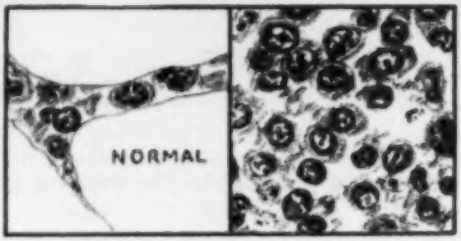
7. "You may have to wait 4-5 minutes before getting a positive Trousseau sign."—R. Cabot.

8. "Reduction in blood platelets is often the first sign of serious disease of the bone marrow and may antedate all the other signs above enumerated."—Wm. Dameshek, M.D., *N.E.J.M.*, Jan. 6, 1938.

9. "In certain cases carcinoma may give rise to a blood picture closely simu-

Dr. Babey, one time Bowen scholar of the New York Academy of Medicine (research Guy's Hospital, London) is now attached to the attending staffs of the Brooklyn and Kings County hospitals and to the teaching body of the Long Island College of Medicine, now a division of the University of the State of New York, and is the editor of this journal's Book News.

lating leukemia—and this without necrosis, infection or fever."—H. Jackson, M.D., *N.E.J.M.*, Feb. 2, 1939.



Microscopic sections showing normal and leukemic bone marrow.

Truths and Concepts Pertaining to the Thyroid

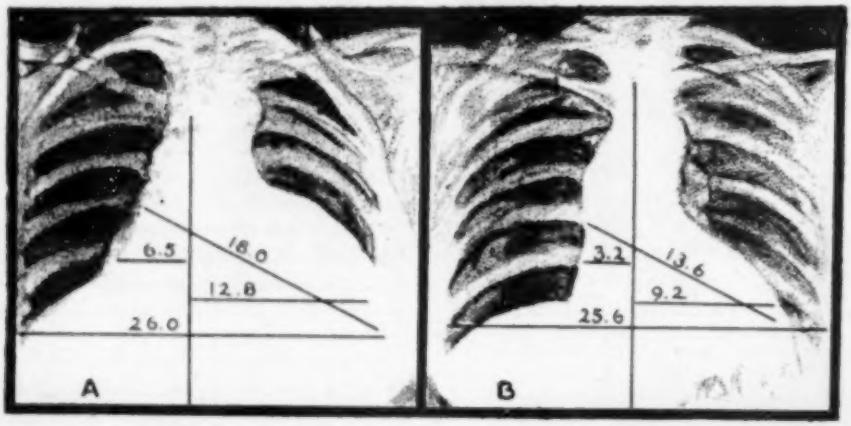
1. "One of the worst symptoms in hyperthyroidism is nausea and vomiting.—It is chiefly important as a bad prognostic sign."—Richard Cabot, Case Records of *M.G.H.*, May 30, 1922.

2. "Finally the response to thyroid may be most important in establishing the diagnosis. The onset of nausea, vomiting, weakness, abdominal pains, collapse and coma after average doses of thyroid is strongly suggestive. Ordinary myxedema seldom fails to make the expected improvement on thyroid; the pituitary variety usually responds unfavorably."—J. Lerman & J. Means, *Trans. Amer. Assoc. for the Study of Goitre*, 1941, p. 9.

3. "—You ought to be able to diagnose thyroiditis as opposed to malignancy in a majority of cases without operation because of the tenderness, persistence of a normal outline of the gland, and persistence of the typical sharp points of the upper poles."—Frank Lahey, *Proc. Interst. Post. Grad. Assoc. N. Amer.*, 1930, p. 369.

4. "Never let a diabetic patient go through a visit in your office unless he takes off his shoes and stockings."—E. P. Joslin, *N. E. J. M.* Vol. 224; 1941 p. 589.

5. "One should always have in mind the possibility of apathetic hyperthyroidism in any patient with marked my-



Shrinkage of heart in myxedema with thyroid therapy.
A. Heart at beginning of treatment. B. Same heart 6 months later.

asthenia, with moderate but definite and persistent degrees of tachycardia, with pigmented skin and with unexplained weight loss."—Frank H. Lahey, *N. E. J. M.*, May 10, 1934.

6. "We likewise feel from our large experience with goitre, now amounting to between twelve and thirteen thousand goitre operations, that any patient with adenomatous goitre may have an unsus-

Specimen showing tongue of intrathoracic adenomatous tissue sometimes overlooked if not demonstrated by x-ray.

A. Upper pole

B. Impression of clavicle

C. Intrathoracic pole

pected intrathoracic goitre. For that reason, all patients with adenomatous goitres should have x-rays of the mediastinum by which a flattening or deviation of the trachea can be demonstarted and intrathoracic extensions visualized."—Frank H. Lahey, *loc. cit.*

7. "No matter how deep intrathoracic goitres are, practically all of them can be removed."—Frank H. Lahey, *loc. cit.*

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Radioisotope Research

The opening of a new laboratory for research involving radioisotopes at the National Institutes of Health of the Public Health Service at Bethesda, Md., was recently announced. One of the few radioisotope laboratories in America designed solely for medical research, the new Isotope Laboratory represents a major addition to already existing laboratory facilities at the National Institutes of Health.

The Isotope Laboratory is prepared for immediate experimentation in a wide variety of fields. These include new projects and several which had been in progress in other NIH laboratories. Some of the projects are as follows:

1) A study with radioactive iodine to determine how the thyroid gland function depends on dietary intake for both normal and thyroid tumor tissue.

2) A study on the biological effects of Alpha particles from Radon, and a comparison of these effects with other types of radiation, especially x-rays.

3) A study with radioactive phosphorus involving the metabolism of various phosphorus compounds.

4) A study with Carbon-14 to determine the distribution of chemotherapeutic agents thought to have value in the treatment of cancer. The effects of these radioactive compounds on both normal and cancerous tissue will also be examined.

Longevity in Relation to Sex

Latest available figures show that the average length of life of white women in the United States has reached a new high of 71 years. The average for white men is 65.5 years.

The figures are based on 1948 death rates.

The average longevity of nonwhites is lower—58.1 years for men and 62.5 years for women, according to the 1948 figures. The difference in average longevity between whites and nonwhites, however, has decreased from about 15 years in 1900 to about 8 years in 1948.

On the other hand, the difference in average length of life between men and women in the United States has steadily increased from less than 3 years in 1900 to 5½ years according to the latest figures.

EDITORIALS

There Is A Santa Claus!

Mr. Oscar Ewing's Public Health Service division of the Federal Security Agency continues to shovel out vast sums of money for various research projects in hospitals, universities, and medical institutions in many States and the District of Columbia. July's 50 awards were to support cancer research and totaled $1,160,818.

We wish these great sums of the American people's money came through some source of disbursement other than the Federal Security Agency. As this kind of Santa Claus in our ineffable political drama Mr. Ewing is miscast.

We do not think such a munificent Santa Claus should be the American most interested in the promotion of compulsory sickness insurance.

Between the "Do-Gooders" and the Reds

Professor Knight of Dartmouth College has pointed out that our "do-gooders" do not usually realize the menace they are to our national existence. The Red, on the contrary, knows exactly "what he is up to."

The "do-gooders" are our phony liberals, many government officials, the "socialicians," the preachers of "causes," the callers for "social justice," the advocates of "appropriate environments" with no account taken of heredity, the believers in centralization of governmental power, the sponsors of pump-priming and deficit spending regardless of inflationary consequences, and *the promoters of the handout state, with its great goal of compulsory sickness insurance.*

The total effect is equivalent to an attack upon our freedom and upon our economic foundations.

Between the "do-gooders" and the Reds the Republic is in great danger. Of the two, the former are the greater menace.

The English Spectacle

Socialized medicine in Britain, speaking through its official organ, *Medicine Today and Tomorrow*, resents its unqualified rejection by such people as Ernest Bevin, who, when ill, never thinks of proceeding any less independently than of yore. It appears that nobody who is anybody orders his medical affairs in any other fashion. They obviously have no use for Health Service hospitals. They pay directly for personal medical service and hospital rooms. Sir Stafford Cripps has shown the same example, and we have not the slightest doubt that Aneurin Bevan himself, chief of the Ministry of Health, would, if ill, act similarly.

The plain fact of the matter is that the socialized service is not good enough for intelligent people seeking the best care when able to pay for it. Britain's impoverishment accounts for the deplorable system which has been imposed upon the masses.

The proponents of socialized medicine in the United States have only to await the ultimate effects of government finance making surely for our own impoverish-

ment. It is not necessary for them to overstrain or excite themselves. Matters could not be proceeding more nicely for them.

There Are More Things in Heaven and Earth, Horatio, Than Are Dreamt of in Your Philosophy

We have already expressed our unqualified approval of GP, the organ of the American Academy of General Practice. But in reading the July issue it was especially borne in upon us that the journalistic pabulum by which the general practitioner lives, by reason of its range and great interest, makes professional life and thought much more exciting and rewarding than the comparatively dull literature of the specialties. While Horatio, the specialist, might run the risk of being made somewhat unhappy by comparing his special fare with the sumptuous menu offered by GP, nevertheless we strongly advise such reading, for it will serve him as a kind of thriller —a fantastic, almost unbelievable exhibition of scenes from the great medical drama that general practice truly is. And it will make him a better specialist in so far as it enriches his professional perspective.

Better subscribe, Horatio, if you really wish to know what is going on in *medicine proper*.

Multiphasic Screening

The mass screening for tuberculosis has suggested that other mass screenings be combined with it. Since we have tests for a number of specific diseases, why not also screen at the same time for syphilis, diabetes, heart diseases, cancer, anemia, nephritis, hypertension, and visual and auditory defects? A whole battery of tests, not just one, is the new concept. This wide application of the screening concept by such a multiphasic method would make our preventive medicine program far more effective than it is at present. It is not diagnosis, but rather "a lead to diagnosis." Such tests would be relatively inexpensive; for periodic health examinations of individuals by practitioners are costly in terms of the doctor's time and laboratory services.

A multiphasic screening has been done in San Jose, California, of about 1,000 persons in four establishments. It took 15 minutes for each person tested and 13 cases of previously unknown significant disease were discovered—diabetes, active tuberculosis and cardiovascular-renal disease.

It was the frequent notation of abnormal cardiac shadows in the course of x-ray screening that propagated this idea. Much credit for promoting the concept goes to Dr. A. L. Chapman, writing in *Public Health Reports*, and to Dr. Lester Barlow, writing in *American Journal of Public Health*.

American Board of Ophthalmology

Candidates for the certificate of the American Board of Ophthalmology are accepted for examination on the evidence of a Written Qualifying Test. These Tests are held annually in various parts of the United States.

Applications are now being accepted for the 1951 Written Test. They will be considered in order of receipt until the quota is filled.

Practical examinations for acceptable candidates 1950: Chicago, Oct. 2-6; West Coast, January, 1951.

Important: Diplomates are urged to keep the Board office informed of al changes of address.

Officers for 1950; Chairman, Dr. Algernon B. Reese; Vice-Chairman, Dr. John H. Dunnington; Secretary-Treasurer, Dr. Edwin B. Dunphy. Executive Office, 56 Ivie Road, Cape Cottage, Maine.

Army's Health

Better in 1949 Than Ever Before

The Army's health was better in 1949 than it has ever been. The U. S. Army today is not only the healthiest army in the world, but the healthiest in all history.

Figures released by Surgeon General Bliss show that the rate of admissions for 1949 was 128 per 100,000 strength per average day. "Admissions" in Army medical reporting include not only hospital patients, but also all persons relieved from duty because of illness or injury beyond the actual day of onset. The 1949 report shows an improvement in Army health for the fourth consecutive year since the end of hostilities and compares with an average wartime rate, excluding battle casualties, of 202 admissions per 100,000 per day. Since then there has been a steady decline, the average daily rate being 178 in 1946, 174 in 1947, and 132 in 1948.

Analyzing the new health record, General Blass attributed it largely to a consistent application of the Army's traditional policy of preventive medicine, an unprecedented low incidence of respiratory diseases, and other factors. "This splendid achievement is even more remarkable when it is realized that in the past year a larger proportion of the Army was stationed in oversea areas than in prewar years. Diseases are much more prevalent in some of these areas than in the United States," General Bliss stated.

The Army report includes rates for the Air Force for the first half of 1949, as well as for the Army for the entire year. The Air Force set up its own medical service last July, and began its own system of health reporting at that time.

The 1948-49 seasonal peak incidence rate for respiratory diseases in the United States was 43 percent of the normal seasonal peak, and the venereal disease incidence rate was about 50 percent lower in 1949 than the postwar peak of mid-1946. Injuries and other categories also showed improvement.

There has been a consistent decline in the death rate, particularly in deaths from disease. The 1949 figures for total deaths were 200 per 100,000 strength per year, against 220 for 1948 and 230 for both 1946 and 1947. There were 50 deaths from disease per 100,000 per year in 1949, 60 in 1948, 70 in 1947, and 80 in 1946.

Rates released by the U. S. Public Health Service for the total civilian population in all age groups showed 989 and 1008 deaths per 100,000 in the United States during 1947 and 1948, respectively.

"The improved health record of the Army is a matter of pride to every member of the Medical Department. With Army medicine now in its 175th year, I am confident that this record will be maintained in 1950," the Surgeon General declares.

Army Civilian Intern Program

Selection of senior medical students for the Army's civilian intern program is proceeding at an accelerated rate since the first of this year. The selections represent 34 of the country's approved medical schools and will intern in 48 different civilian hospitals.

The Surgeon General's Selection Board has convened several times in order to select the 300 candidates for whom the program provides spaces.

To be eligible, a candidate must be a potential graduate who will begin an internship between 1 January and 31 December 1950, and must have been accepted for internship training in a civilian hospital acceptable to the Surgeon General.

Successful candidates will be commissioned in the Army Medical Corps Reserve and permitted to complete their internships as officers on active duty with pay and certain allowances of the grade of first lieutenant.

Physicians selected for this training program will serve two years on a duty status for the year or major portion of a year of formal training received.

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Cardiovascular Research at Wisconsin

University of Wisconsin scientists soon will be swinging a concentrated right hand punch at the nation's chief cause of death—heart disease

Through a grant of $291,000, the University has begun construction of a Heart Research institute which will consolidate all phases of cardiovascular research.

A fifth and sixth floor addition to McArdle Memorial laboratory will house this important research project. The move will facilitate coordination between heart research in physiology, pharmacology, anesthesiology, medicine, surgery and anatomy.

The quarters, expected to be ready next fall, will be new, but the research program is not. Wisconsin scientists have been heavy contributors to heart research since the first course in medicine was offered at the University back in 1904.

Since that time work done at Wisconsin has pyramided to a highly important place in man's knowledge of the cardiovascular system.

Public Health Survey

Poliomyelitis

The poliomyelitis record last year shows how unpredictable the disease is and why many communities need medical and financial aid to meet an epidemic situation, according to Dr. Louis I. Dublin, second vice-president and statistician of the Metropolitan Life Insurance Company.

Attack rates last year ranged from a high of 86 cases per 100,000 population in Idaho to a low of 5 in South Carolina. Some local areas, however, experienced rates much higher than their State figures. Two thirds of the states recorded rates of 20 per 100,000 population, which is considered of epidemic proportions. Among the states with rates below 20 there were several which only the previous year were seriously hit, whereas many of the 1949 leaders had relatively few cases the year before.

"In North Carolina, for instance," Dr. Dublin said, "the attack rate in 1949 was only one tenth of the 1948 figure. In Maine, on the other hand, the rate in 1949 was 12 times that for the previous year. Even in those States with high rates in both 1948 and 1949, different areas within the State were generally affected each year."

He pointed out that although the national figure was at a peak last year, the highest rate among the states—86 recorded in Idaho—has been exceeded in other years. New York and New Jersey in the 1916 epidemic. Minnesota in 1946, and South Dakota in 1948 all reported rates well over 125 per 100,000 population.

Even the seasonal pattern of the disease shows marked variations, Dr. Dublin pointed out.

"When a local epidemic is under way it cannot be predicted early when the peak will occur or how high it will be," he said. "For the nation as a whole last year, three fourths of the cases occurred in July through September, but in California and Texas this proportion was only about 50 percent. Peaks varying in level ranged in time from early July in Texas to late September in California.

"The unpredictability of the seriousness of an impending epidemic is illustrated by figures for New York City. The cases occurring in July, the early epidemic month last year, were one-ninth of the total, but in an earlier epidemic year, 1944, only one twenty-fifth occurred in that month."

Progress in the battle against poliomyelitis is indicated in the recent reduction of the case fatality rate from the disease, according to Dr. Dublin. Although the reported incidence rate of poliomyelitis in the United States in 1949 was about twice that for 1931, the death rate among children insured in the Industrial Department of the Metropolitan Life Insurance Company last year was only about half that experienced in 1931.

Multiple Births

The chances that a forthcoming blessed event will produce twins are one in 92. Triplets are born once in 9,400 confinements, and quadruplets once in 620,000 confinements. The likelihood of quintuplets is extremely remote and that they will live even more so. Only two authenticated cases in medical history of "quints" surviving infancy are the Dionnes of Canada and the Diligentis of Argentina.

The foregoing, from the statisticians of the Metropolitan Life Insurance Company, is the result of a study involving 36,000,000 confinements, based upon data from the National Office of Vital Statistics for the period 1934-1947.

The chances of a multiple birth are shown to increase progressively with the advance in age of the mother to a maximum at ages 35-39. The probability is about 17 in 1,000 for women in their late thirties, as contrasted with only 6 in 1,000 for teen-age mothers. At every age period, the chances that a confinement will yield plural births are greater for Negro than for white mothers.

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Childhood Tuberculosis

Tuberculosis now claims relatively less than one fifth as many lives among children as it did twenty years ago, statisticians of the Metropolitan Life Insurance Company report. The decline in mortality is evident among children at all ages, with the greatest improvement at the school ages.

Increased hospitalization of adults who have contracted the disease is considered largely responsible for the gains which have been made. In this way children are freed from contact with active cases. Other contributing factors are the decline in the prevalence of the disease in adults, the better care and feeding of children, and the generally higher standards of living which help make children healthy and more resistant to disease.

The death rate among the company's industrial policy-holders at ages 1 to 14 has dropped from 20.4 per 100,000 in 1930 to 3.7 in 1949. Further improvement is foreseen by the statisticians as a result of present case-finding efforts among adults and more likely hospitalization of cases when discovered.

"It is especially important for the protection of children that all school personnel—teachers, nurses, custodians, and food handlers—be x-rayed annually," declare the statisticians.

Because tuberculosis is so infrequent in children today, mass x-ray campaigns are not economical for detecting the disease. Teachers are in the best position for discovering potential cases through observation of youngsters who appear to be generally run-down, especially underweights, and of those with a history of the disease in the family, according to the statisticians. Annual health examination of both preschool and school children will likewise aid in the early detection of cases.

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Household Mishaps

Home accidents currently claim about 30,000 lives yearly in the United States, more than double the combined total from poliomyelitis, appendicitis, the principal childhood diseases, and the diseases incidental to childbearing, according to the statisticians of the Metropolitan Life Insurance Company.

Non-fatal home accidents resulting in more or less serious injury total approximately 4,500,000 annually.

Despite the magnitude of the existing yearly toll, encouraging progress during the past 15 years in reducing the frequency of fatal home accidents is reported by the statisticians. During this time among the company's industrial policyholders the death rate from this cause has

fallen from 13.6 to 8.1 per 100,000, a drop of 40 percent.

The decrease in mortality has been more pronounced for adults than for children, and somewhat greater for women than for men.

An important contributing factor in bringing about the decrease has been the modernization of the American home, making it a safer place in which to live and work, of which good examples are the marked improvements in lighting, cooking, and heating equipment. As a result, the death rate from burns and scalds among girls and women is now less than half of what it was only 15 years ago.

"Notwithstanding the encouraging downward trend for fatal accidents in and about the home, these mishaps still constitute one of the major sources of preventable mortality," the statisticians point out. "Further substantial savings in life and limb should be effected if the safety education efforts now being put forth by a number of agencies gain the wholehearted cooperation of the public."

Life Expectation

A century's progress in American health conditions is reflected in an increase in expectation of life at birth from less than 40 years in 1850 to about 67 years today, according to Dr. Louis I. Dublin, chief of statisticians of the Metropolitan Life Insurance Company.

"Every branch of the medical and sanitary sciences has shared in the unparalleled progress of the past century," he declared, "with the result that the death rate has been greatly reduced and many diseases which once were rampant are now either under control or well on their way to control. We now enjoy a vastly higher standard of living—more abundant and better food, shelter, clothing, educational and recreational facilities."

The gain in longevity was at a much more rapid rate during the second half of the century than during the first half. For example, the gain of 27 years for white males is made up of a 10-year gain from 1850 to 1900 and a 17-year gain since then, and the 30-year gain in the case of white females divides into a 10½-year increase up to 1900 and 19½ years since that time.

Dr. Dublin is optimistic as to further gains in length of life.

"The medical and sanitary sciences are advancing at a fast pace, our standards of living are still improving rapidly, and our people have become alert to their stake in sound public health and medical care," he points out. "With the expectation of life of the American people now near the Biblical three-score-and-ten, there is good reason to expect a life expectancy of 75 years within the next generation."

Synthetic Estrone

The first total synthesis in the United States of the female hormone estrone has been accomplished by University of Wisconsin chemists.

The synthetic duplicate of natural estrone was developed from easily obtainable coal tar products after four years of laboratory experiments, Dr. W. S. Johnson, who headed the research, reveals.

Costly estrone finds wide medical use in treatment of cancer of the prostate in men and in treating latent development and menopause in women.

At the present time, estrone is obtained by extracting the hormone from the urine of pregnant mares, or by chemical conversion of closely related substances such as cholesterol. This process is called "partial synthesis."

Vaccination for Tuberculosis Control

Report, Council on the Management and Treatment of Diseases of the Chest, American College of Chest Physicians

Considerable attention has recently been given to BCG vaccination in the public press. From this publicity the impression might be gained that this procedure alone holds promise of real control of tuberculosis. Since such an impression might postpone indefinitely the establishment and extension of accepted control measures, this statement of the status of vaccination in tuberculosis control programs is issued.

1) Control measures in tuberculosis should be directed at eradication of the disease as a major cause of death or disability.

2) The marked improvement in tuberculosis mortality figures, particularly for the ages under 30, demonstrates the effectiveness of the present control program.

3) The low rate in children and the continuing high rates in adults over 50 emphasize the location of the problem at the older age levels rather than in children. Under these circumstances, the efficiency of a method of tuberculosis control would be measured by its effect on the mortality from tuberculosis in the older age group, rather than in children.

4) The addition of a vaccine to the present control program requires both careful and adequate consideration. Of the vaccines prepared, BCG has been used most widely and is the one most often discussed.

5) This has been used for more than 25 years and recently many millions of people have been vaccinated. However, it must be stated that there is no evidence that meets strict scientific requirements demonstrating that BCG affects the control of tuberculosis, despite the very suggestive results of a few studies.

6) Because of the above fact and because there is no general agreement among investigators anywhere in the world on such fundamental matters as the preparation of vaccine, the method of vaccination, what constitutes a successful vaccination, how resulting immunity may be measured, how long such immunity lasts, etc., the procedure would seem to be still in the investigational period.

7) It is therefore recommended that investigation of vaccination in tuberculosis be continued and increased under standard and stringently controlled conditions. This investigation should be designed to determine if the vaccine is indeed effective and what the limitations of its use might be. It would seem desirable that in each

county, one agency, preferably the official health agency, should have control of the investigation.

8) Until this has been determined and these controlled studies completed, the use of BCG vaccine should be limited to such investigative studies.

9) At the present time the methods which have been proved effective in tuberculosis control should be increasingly applied to all segments of the population, regardless of decreasing mortality figures, so long as tuberculosis remains an important cause of death. These measures include mass x-ray case finding, early diagnosis, rapid institution of treatment, isolation of open cases, and the restoration of the patient to normal life.

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Health Department Distributes Procaine Penicillin

Procaine penicillin G with 2% aluminum monostearate is distributed to physicians without charge by the New York City Department of Health for the treatment of syphilis and gonorrhea.

Penicillin is supplied in recommended dosages, after verification of diagnosis, for the treatment of patients with gonorrhea, primary syphilis, secondary syphilis, other early syphilis of less than two years' duration, or syphilis in pregnancy. The Department will continue to distribute arsenical drugs and bismuth.

In order to obtain penicillin or the arsenicals an official case report (form 417V) must be on file with the Department of Health for each patient diagnosed and/or under treatment for venereal disease. It is also required that contact information be submitted on the patient report form. A laboratory report is not considered a case report and does not satisfy requirements of the Sanitary Code.

Patient report forms 417V, drug application blanks and mailing envelopes are obtainable from the Bureau of Social Hygiene, Department of Health, 125 Worth Street, New York 13, New York.

Recommended penicillin treatment schedules for syphillis and gonorrhea are contained in the latest edition of the physicians' manual issued by the Department. It is titled, "Office Management of Venereal Diseases."

Rosenstock Memorial Foundation's Fellowship Plan for 1951

The Rosenstock Foundation will offer for 1951 two fellowships in the amount of $3,000 for one year for the support of individual medical research to be conducted in a hospital in greater New York with Medical School affiliations. Fellowships may be granted either for full time or part time medical research.

Fellowships will be limited to those who apply within three years of the completion of internship or residency, and applications must be endorsed by the Director of the hospital where it is proposed that the research will be conducted.

Applications may be made in any form that the applicant may desire outlining the nature of the work to be undertaken and the qualifications of the applicant. After endorsement by the Director of the hospital, the application should be forwarded to the Foundation, at 42-16 West Street, Long Island City 1, New York.

To save time for the Medical Committee in order to expedite the announcement of awards, it would be appreciated if applications were furnished in triplicate.

Applications should be received by November 1, 1950, for review by the Medical Committee, consisting of Dr. William Thalhimer, Chairman, Dr. Martin G. Vohaus, and Dr. Edgar G. Miller.

The Rosenstock Memorial Foundation, Inc., 42-16 West Street, Long Island City 1, New York.

PHYSICAL THERAPY

MADGE C. L. McGUINNESS, M.D.*
New York, N. Y.

The Influence of Naturally Carbonated Mineral Water on Gastric Motility and the Secretion of Hydrochloric Acid

F. A. Hellebrandt and S. J. Houtz (*Archives of Physical Medicine*, 31:25, Jan. 1950) report 126 experiments on eight normal adults, to determine the effect of two Saratoga Springs waters on the secretory and motor behavior of the stomach. One of the waters studied was a naturally carbonated alkaline-saline water (Saratoga Geyser) and the other a saline-alkaline water (Saratoga Coesa); a few studies were also made with various Czechoslovakian mineral waters of similar composition. The effects of the test waters were compared with those of a noncarbonated lightly mineralized control water, with the response to histamine, and with spontaneous variations in the acidity of the gastric contents and gastric motility. It was found that the waters tested increase gastric tonus in the quantities given, but inhibit motor activity, dissolve gastric mucus, and at first depress, but then stimulate the secretion of hydrochloric acid. Experience at various spas has shown that patients with dyspepsia and chronic gastritis, characterized by large quantities of mucus in the gastric secretion, hypoacidity or achlorhydria and rapid emptying with increased peristalsis are benefited by spa treatment including drinking of the waters. These studies indicate that the mineral waters themselves have a beneficial effect on cases of this type, as these results in these experiments were obtained under laboratory conditions without the aid of the other features of spa treatment, such as rest and relaxation, controlled exercise and dietary regulation.

COMMENT

Following tests under meticulous laboratory proceedings, the authors conclude that direct observation substantiates the belief that the Geyser and Coesa springs of the Saratoga Spa have a definite beneficial effect on certain gastro-intestinal conditions. These waters were introduced to the white settlers in 1767 by the Mohawk Indians who had a long history of their healing qualities. New York taxpayers can derive slight satisfaction from the yearly deficit of 500,000 dollars—some citizens who go in for the cure are aided sufficiently to continue help with these taxes. More of us could help the State and ourselves and also have some legitimate excitement if we packed that "Saratoga trunk" and went at the right time to also enjoy some fun.

Examination of the Carlsbad Springs likewise confirms the belief that the Europeans who take the "Kur" vindicate the judgment of countless generations who have praised the healing powers of these waters quite apart from the beneficent effects of the sunshine, beautiful and restful surroundings, regimen and music.

M.C.L.McG.

Systemic Thermotherapy with Special Reference to Hot-air Baths

V. R. Ott (*British Journal of Physical Medicine*, 13:9, Jan. 1950) discusses the use of the hot-air bath, as now employed in Switzerland. The Finnish hot-air bath, or so-called Sauna bath, is used. A rather small room with rough wooden walls is fitted with benches that accommodate several adults sitting up or lying down; this is heated by a stove to a temperature of about 80°C.; the relative humidity of the air can be varied but normally is low

* Diplomate American Board of Physical Medicine; Director Physical Medicine Misericordia Hospital; Consultant Physical Medicine Lenox Hill Hospital.

(5 to 15 per cent). The bath lasts twenty minutes, and is followed by a cold spray or short cold immersion bath. The predominant characteristics of this heat treatment are high temperature and relatively low humidity. The latter is of special significance, because of its effect on the evaporation of water from the body; the hot-air bath, it has been found, is not only a sweating procedure, but also a physical pyrexia treatment, raising the temperature of the body to febrile levels. But because of its short duration, it is not the same as artificial fever treatment of longer duration. From a study of the physiological effects of the hot-air bath the author concludes that its most important effect is its action on the tonic level of the whole autonomic nervous system, not the sympathetic or parasympathetic alone—an "amphotonic" autonomic reaction. This explains the observed fact that the condition of individual patients affects the results of treatment; it also makes it possible to establish therapeutic indications for this form of treatment.

COMMENT

The sauna or hot-air bath is an excellent medium for short, systemic thermotherapy followed by a stimulating cold spray or quick immersion. Its effect is on the whole nervous system. A stove heats the room and the humidity is kept low, 5 to 15 per cent. Thus we return again to the devices of our ancestors to use heat and cold to alter body states with means close at hand. The ancient Keltic Bath was a small room with heated stones on which cold water was poured, thus raising clouds of steam to induce fever and perspiration. This bath was of longer duration, often to an hour or hours, and then the patient plunged into cold water, usually a stream, though cold water could be poured upon him on occasion. A modification of this was known as the Roman-Irish Bath and was in use in some German spas. Humidity in this bath was high, perspiration was profuse and reaction prompt. [Report saith cures were quick and efficacious!]

M.C.L.McG.

Electric-Blanket Treatment of Rheumatoid Arthritis

Eric Frankel (*Lancet*, 2:1084, Dec. 10, 1949) reports the use of the electric blanket in the treatment of rheumatoid arthritis. This method is employed to produce sustained vasodilation. The patient's feet, legs and pelvis are first protected by sheets of cotton-wool bandaged to the limbs and body. A large electric blanket is then wrapped around the lower half of the patient's body, kept in position by bandages. The blanket is left in position for long periods, four weeks in some cases, the patient being taken out only for toilet purposes; the cotton-wool is renewed as necessary. The temperature between the cotton-wool and the skin is determined every four hours and is maintained at 110° to 115° F. This type of heat therapy produces a slight pyrexia (between 99° and 100° F.), generalized vasodilatation and pronounced sweating; the pulse rate is slightly increased. There is loss of fluid and salt from the body, but this is corrected by increasing the intake, according to fluid and chloride excretion in the urine. It has been found that patients tolerate this treatment well; they feel hot and perspire profusely, but show no serious constitutional disturbances; their appetite is good and they gain weight. They are given a full diet with supplements of ascorbic acid and vitamin B complex in tablet form, but no other treatment is given. In the last eighteen months, 14 patients have been treated by the electric blanket method, 11 of whom had advanced rheumatoid arthritis, 3 moderately advanced. All but one of these patients was in the blanket for more than one week (two to four weeks), but all showed definite improvement in the first week of treatment, increase in range of movement, considerable relief of pain, stiffness and swelling. Though improvement has been maintained in all these cases, it is impossible to state whether further relapses will occur or not. The electric blanket treatment can be given at home under the supervision of the patient's own physician. It should be tried in early rheumatoid arthritis and during relapses, as in this way, the crippling effects of the disease might be prevented.

COMMENT

The electric blanket is a refinement of the mechanical age. The heat effects are the same as in the baths already described, mild hyperthermy,

sweating and general vasodilation; however, with the dry heat, longer treatments can be given with consequent longer effects. As these are what is desired in rheumatoid arthritis, early use of this therapy should be started and maintained at intervals to promote relief of pain, disability and crippling. It is a home treatment easy of application.

M.C.L.McG.

Physical Medicine Procedures in the Care of Respirator Patients

E. Austin and associates (*Archives of Physical Medicine*, 31: 76, Feb. 1950) describe the physical therapy procedures used for respirator patients at the Los Angeles County Hospital during the poliomyelitis epidemic of 1948. For patients with bulbar paralysis who are acutely ill and often have tracheotomies, hot packs and other physical medicine procedures are not employed until the patient's condition is stabilized. Occasionally, however, a pack may be applied to one extremity for the relief of transient pain or tenderness. Positioning is carefully watched but is not usually a problem in cases of bulbar paralysis. The limitation of position in the respirator may cause muscle shortening, especially of back, hamstring and shoulder adductors, which is best treated with supine packs or Kenny packs to the affected parts, with active stretching when the patient can be treated in or out of the respirator. When respiratory difficulty is due to spinal involvement of the diaphragm, intercostal muscles, or both, continuous chest packs are used, if the temperature is below 101 or 102 F. When the patient is placed in the respirator, the continuous chest packs are continued; when the patient's condition is stabilized, half packs are begun, i. e., upper and lower extremities are packed alternately. As the patient's condition improves packs are used preliminary to the initiation of range of motion and gentle stretching exercises, combined with muscle reeducation as indicated and as tolerated in each case. Positioning is very important for the respirator patient, and early in the disease may be the only physical medicine procedure that can be employed. The equipment used for positioning must be light and easily handled; ankle, knee and hand rolls are used routinely; air mattresses are of value in preventing bed sores, but pillows are also necessary in some cases. As soon as the patient's condition has been stabilized and the temperature has been normal for forty-eight hours, his tolerance to removal from the respirator is determined. As this tolerance increases he may be removed from the respirator for routine physical therapy and muscle reeducation. Short periods out of the respirator at frequent intervals are preferable to longer periods, which may tire the patient. It is emphasized that each patient presents an individual problem and "must be handled individually."

COMMENT

Bulbar paralysis greatly complicates poliomyelitis. As a respirator is essential, eternal vigilance is necessary to assuage pain, prevent deformities and bedsores and to try to recondition the patient for the future. Physiatrists of long experience early learned that every single case of rehabilitation requires deep study, individually, if one is to do his best by the patient. Each patient is a single, separate problem and the most careful teamwork of surgeon, internist, nurse, technician, psychiatrist, etc., is needed for good results. There can be no hard and fast rule. Experience alone teaches. This is especially true of respirator cases, the care of which was admirably taken over by these fine workers in the severe 1948 epidemic in Los Angeles and brought to a rarely successful conclusion.

M.C.L.McG.

The Importance of Bracing in the Treatment of Cerebral Palsy

H. E. Hipps and G. Waters (*Physical Therapy Review*, 29:539, Dec. 1949) report the use of braces as a part of the treatment of patients with cerebral palsy, as a valuable aid to other methods of physical therapy especially muscle training exercises. The use of a brace is of aid in accelerating the learning of muscle control. Beginning deformities, which are due to improper muscle action, can be prevented by the proper application of a brace; and certain deformities, such as a palmar flexed wrist or an equinus foot can often be permanently corrected by wearing a spring action brace. The necessity for surgery may therefore be elimi-

nated in some cases. Six illustrative cases are reported.

COMMENT

The judicious use of braces is most important in restraining the uncontrolled muscular activity of the cerebral palsied. The brace, cutting out all but one purposeful action, is worn continuously until the patient learns to do well that particular action. The spastic antagonists being at rest, the weakened, overstretched muscles can regain their former strength with continued daily practice. One or more muscles (or sets of muscles) is thus gradually trained. Keep the patient fairly busy for the greatest effect in the shortest time.

M.C.L.McG.

The Influence of "Red Light" and of "Ionization" Upon the Penetration of the Skin by Penicillin

M. Cutner (*British Journal of Physical Medicine*, 12:144, Nov.-Dec. 1949) reports experiments to determine the effect of ionization and red light (infra-red rays) on the penetration of penicillin into the skin. It was found that penicillin solutions placed in contact with the unbroken skin or with chronic granulation tissue (varicose ulcers) at body temperature do not penetrate the skin in any measurable amount. When a pad soaked in penicillin solution was applied to the skin and the galvanic current passed through it, as in iontophoresis with inorganic substances, there was also no appreciable absorption. "Red light," obtained by the use of a special glass filter attached to a radiant heat lamp which restricted the radiation mainly to the red and short infra-red rays, was applied to an area of the skin for thirty minutes at an intensity of maximum toleration. Following this, penicillin was absorbed to a demonstrable therapeutic level from a penicillin-solution compress placed on the same skin area. This method of treatment by the application of red light followed by the penicillin-solution compress has recently been employed in the treatment of local infections, such as whitlow, axillary abscess and finger infections, with good results and more rapid healing than has been obtained with other methods.

COMMENT

The use of radiant energy, which includes infra-red, luminous and non-luminous courses, has always been a favourite remedy for infections with the physiatrist. It long antedates the discovery of the antibiotics. Hot wet compresses kept up the good work between sessions, assuaging pain and discomfort and accelerating pointing and discharge of pus. The addition of sufficient penicillin locally speeded up the process further, in those here reported who refused it by hypodermic. Since the antibiotics can now be taken orally, there should be a rapid surcease of prolonged infections.

M.C.L.McG.

RHINOLARYNGOLOGY

L. CHESTER McHENRY, M.D., F.A.C.S.*
Oklahoma City, Okla.

Streptomycin in Laryngeal Tuberculosis

G. E. Lieberman and W. A. Lell (*Archives of Otolaryngology*, 51:335, March 1950) report the treatment of 37 patients with laryngeal tuberculosis with streptomycin in a dosage of 1 Gm. daily (0.5 Gm. twice a day) for periods of two weeks to six months, averaging three months. Most of these patients had bilateral pulmonary tuberculosis of the fibrocavernous type. Of the 37 patients treated, 21 showed definite improvement of the laryngeal lesions and 8 moderate improvement; 5 showed no improvement or relapsed after temporary improvement; and 3 died from advanced pulmonary tuberculosis. In the patients who showed

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improvement under streptomycin therapy, pain and dysphagia were relieved promptly; there was pronounced relief of hoarseness; and many patients showed a considerable gain in weight. In patients treated in the early stages, with moderate edema, inflammation and infiltration of the larynx, the laryngeal lesion healed completely or nearly so. In one case a small tuberculoma was removed by direct laryngoscopy; after which the larynx healed completely. The toxic effects of streptomycin included diminution of vestibular responses (in 9 cases) with total abolition of vestibular responses in 2 additional cases; severe dermatitis, diminished hearing, and vertigo and tinnitus in one case each. In the patient who developed vertigo and tinnitus, streptomycin had to be discontinued after twenty-seven days of treatment, but even in this case, the laryngeal lesion showed definite improvement. Routine examination of the larynx during treatment is necessary for proper evaluation of the results; in most cases a mirror laryngoscope can be used. If there is any doubt about the diagnosis, direct laryngoscopy and biopsy are necessary, as a laryngeal lesion in a patient with pulmonary tuberculosis is not necessarily tuberculous.

William McKenzie (*Journal of Laryngology and Otology*, 64:165, April 1950) reports the treatment of 12 cases of laryngeal tuberculosis with streptomycin in a tuberculosis sanatorium in England. The dosage employed was 1 Gm. daily; the duration of treatment varied but was not prolonged beyond three months. In 6 of the 12 cases, the laryngeal lesion healed completely and in 5 showed definite improvement; only one case showed no definite response. In some cases a good result was obtained with only three or four weeks of treatment. Five of the patients developed some vestibular symptoms, which in 2 cases consisted only of "slight unsteadiness." No other toxic reactions are noted.

COMMENT

These are interesting reports and in agreement with other reports of similar conditions treated with streptomycin. Certainly this antibiotic offers a definite advance in the treatment of laryngeal tuberculosis. L.C.McH.

Radiation Exposure of Personnel Handling the Monel Metal Nasopharyngeal Applicator

H. J. Rubin and associates (*Annals of Otology, Rhinology and Laryngology*, 59:90, March 1950) report the use of radiation measuring devices in a series of treatments with the 50 mg. Monel metal nasopharyngeal radium applicator, to determine the amount of radiation exposure of the physician and attendants during treatments. It was found that with the technique employed, the total body irradiation for the physician giving the treaments did not exceed 6 mr. (milliroentgens) per treatment: the tolerance dose for whole body irradiation is 300 mr. per week. The average radiation exposure of the length of both index fingers of the physician was 26 mr., and of several finger tips 50 mr. per treatment. As no official recommendation for permissible exposure for hands and fingers has been made, 600 mr. per week has been adopted as such permissible exposure. In determining the number of treatments that each physician can give with the Monel metal nasopharyngeal indicator, without danger of overexposure to radiation, the finger tip exposure, rather than the whole body exposure, is the limiting factor. On this basis, the maximum number of treatments that one physician may give in a week is twelve. On the basis of these studies, the usual recommendations in regard to the number of treatments that a physician may give with this type of applicator without danger of excessive radiation exposure appear to be "too high for safety."

COMMENT

There are obviously a great many variable factors determining the amount of radiation exposure by the doctor who gives these treatments. There is also some question as to the amount of radiation and possible late effects of such radiation from the standpoint of the patient. This leads us to emphasize the fact that the Monel metal radium applicator was designed

for treatment of excessive lymphoid tissue about the orifices of the eustachian tubes which interferes with their function. The radium applicator should not be used for any other condition and should be used only very carefully and with the recommended dosages for this condition.

L.C.McH.

Observations on the Use of Intravenous Procaine as an Antitumefaction Agent in Rhinoplastic Surgery

R. B. Lewy (*American Practitioner and Digest of Treatment*, 1:500, May 1950) reports the use of intravenous procaine in cases in which rhinoplastic surgery was done and in which a considerable amount of postoperative swelling was to be anticipated. All the patients were males and war veterans; the technique used was that developed by Joseph for rhinoplasty. It was found that the intravenous administration of 1 Gm. procaine in a 0.1 per cent solution or of 2 Gm. in a 0.2 per cent solution at the rate of 180 drops per minute was safe. Comparison was made in regard to the amount of postoperative edema, swelling and ecchymosis in the region of the eyelids, bridge of the nose, malar regions and tip of the nose in those patients not given procaine intravenously and in those given procaine during operation. In the cases given procaine intravenously unless there was at least 50 per cent less swelling, the treatment was considered a failure. In 27 cases given procaine intravenously, postoperative swelling was much reduced in 19 cases, and not reduced in 8 cases. The best results were obtained with the administration of 2 Gm. procaine in 0.2 per cent solution; in the 7 cases given this dosage intravenously, there were no failures. The cause of this action of procaine is not known; it has not been determined whether it is due to a local interruption of a reflex arc, or whether it is both a local and a central action. Further study of this effect of procaine in rhinoplastic surgery, and perhaps in other types of surgery, by other investigators is desirable.

COMMENT

Intravenous procaine has been much used recently for various things, most of which have to do with interference with proper function of arterioles. This would seem to be extremely useful in avoiding the intense edema which follows some of this surgery about the nose.

L.C.McH.

Origin and Treatment of Osteomas of the Paranasal Sinuses

O. E. Hallberg and J. W. Begley, Jr. (*Archives of Otolaryngology*, 31:750, May 1950) report a series of 51 cases of osteoma of the paranasal sinuses. The diagnosis was established either by the roentgenological findings or by pathological examination of the tissue removed at operation. In 40 cases, the osteoma originated in the frontal sinus, in 9 cases in the ethmoid sinus and in 2 cases in the maxillary sinus. In the 40 cases of osteoma of the frontal sinus, the tumor was removed surgically in 19 cases, with no postoperative deaths. In the other cases, the lesion was either too small for surgical removal or was found accidentally at roentgenologic examination and caused no symptoms. In some of these cases, the patients are examined roentgenologically from time to time. In 27 cases the osteoma had extended into neighboring structures, most frequently into the orbit or into the ethmoid sinus on the same side. The most frequent symptom was frontal pain (10 cases); in 7 cases there was a profuse nasal discharge on the same side as the tumor; in these cases infection of the frontal sinus was present; a periorbital swelling was present in 7 cases, and in 4 of these there was displacement of the eyeball with diplopia. In 20 cases, the osteoma caused no symptoms. At operation, retained pus or granulation tissue was found in the involved frontal sinus in 8 cases; and retained mucus in 4 cases; there was a fistula in the eyebrow in 2 cases; pyocele, brain abscess and pneumoencephalocele in one case each. There was no mucocele in this series, although mucocele has been reported in conjunction with osteoma of

the frontal sinus. In one of the cases in this series, pathological examination of the tumor showed most of the tissue to be osteoma, but there were a few scattered areas of osteogenic sarcoma, grade 2; this is an unusual finding, as no similar case was found reported in the literature. In the 9 cases of osteoma of the ethmoid sinus, extension occurred to neighboring structures in all cases; definite symptoms were present in all cases, the most common symptom being frontal or maxillary pain. Operative removal of the tumor was done in 8 of the 9 cases, with one postoperative death; in the case in which operation was not done, the osteoma was very large, and there were two obtuse osteomas elsewhere in the cranium. In the 2 cases of osteoma of the maxillary sinus, the tumor was removed in both cases by the Caldwell approach with the formation of a large window in the antrum underneath the inferior turbinate process; this relieved the symptoms in both cases.

COMMENT

This is an interesting report with definite, careful clinical observations. It would seem that these tumors need not be removed unless they are causing definite symptoms, or so situated that their continued growth would cause future symptoms. L.C.McH.

Acute Subdural Empyema Secondary to Frontal Sinusitis

J. A. Mufson and M. Wagner (*Archives of Otolaryngology*, 51:335, April 1950) report a case of acute subdural empyema complicating frontal sinusitis, in which the patient recovered. Operation was done when the patient was in deep coma; the subdural space was drained, and both sulfadiazine and penicillin were given; local irrigation of the subdural space with penicillin through the drainage catheter was employed, as well as the administration of penicillin parenterally. Prior to 1948, acute subdural empyema complicating a sinusitis was fatal; most of the cases reported were studied at autopsy. The use of the sulfonamides and of penicillin has improved the prognosis, but prompt operation, as soon as the diagnosis is suspected, is indicated. The initial symptom may be a hemiparesis, developing rapidly (as in the case reported) on the contralateral side or a Jacksonian epilepsy. This is associated with a rise in temperature and a rapidly developing coma. In such cases exploration of the subdural space should not be delayed. Eradication of the primary focus of infection in the sinus or removal of osteomyelitic bone (as in the authors' case) should be done later after the subdural infection has been cleared.

COMMENT

This is an interesting report which emphasizes that heroic surgery is still necessary in these extremely ill patients if they are to have a chance for survival. There is, I believe, room for argument as to whether drainage of the primary focus of infection in the sinus or removal of the osteomyelitic bone should be done after the subdural infection has been cleared or at the primary procedure. This will have to be determined for each individual patient. L.C.McH.

OTOLOGY

L. CHESTER McHENRY, M.D., F.A.C.S.*
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Ménière's Syndrome: A New Drug for Control of the Acute Attack

Miles Atkinson (*Archives of Otolaryngology*, 51:312, March 1950) reports the use of a new barbituric acid derivative, 5-ethyl-5-(2-methylallyl)-thiobarbituric acid,

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known as V-12 or Mosidal,® in the treatment of the acute attack in cases of Ménière's syndrome. V-12 alone was effective in relieving the attack promptly in 21 of 32 patients. The use of scopolamine hydrobromide with V-12 did not increase the effectiveness of the treatment. The administration of riboflavin (50 mg.) with the V-12 capsule resulted in complete relief or definite improvement in 9 of 11 patients who had not responded satisfactorily to V-12 alone or combined with scopolamine. In addition 6 other patients were treated with the combination of V-12 and riboflavin at the onset of acute attacks with complete relief in all cases. The sodium salt of V-12 was used for intravenous injection in 4 patients in 6 acute attacks in which severe nausea or vomiting was combined with vertigo; 150 mg. in 5 cc. of water was injected slowly, producing a narcosis of five to fifteen minutes' duration, followed by complete relief of symptoms in 5 of the 6 attacks; and pronounced, but not complete relief, in the sixth attack. Drowsiness occurred in only 2 patients, and in one of these cases was so severe that the use of V-12 was discontinued.

COMMENT

Patients with acute attacks of Ménière's Syndrome are in an extremely distressing condition and any quickly effective therapy is very valuable indeed. This article, by a very careful observer is of very considerable interest. L.C.McH.

Allergy of the Ear

A. Dintenfass (*Archives of Otolaryngology*, 51:582, April 1950) notes that allergic manifestations may affect the external ear, the middle ear and eustachian tube, and the internal ear and auditory nerve. The skin of the external ear may show the same allergic conditions as the skin of other parts of the body. In the author's experience he has found that the allergic nature of cases of otitis externa is often not suspected or diagnosed; while contact dermatitis is the most usual form of allergy of the external ear, food or drugs taken by mouth may cause eczema, urticaria or purpura. In the case reported an acute allergic reaction in both external auditory canals was found to be due to local application of sulfonamide; in this case there was a personal and a family history of allergy. In allergy of the middle ear, the typical symptoms are intense pain, partial deafness and tinnitus of one or both ears, the drum membrane is reddened and swollen, but does not show the convexity typical of infectious otitis media; it may show "a whitish cast," similar to the nasal mucous membrane in cases of nasal allergy. The chief problem in these cases is to determine the nature of the allergen. Allergic otitis media may also be secondary to nasal allergy—allergic rhinitis or hay fever. In a case reported, two attacks of allergic otitis media occurred at the onset of the ragweed hay fever season at the time the nasal symptoms of hay fever also developed. This patient had a definite history of seasonal and perennial allergic rhinitis and a family history "replete with allergic diseases." In the inner ear, Ménière's symptom complex is a frequent manifestation of allergy. In a study of more than 200 patients in an Army hospital, evidence of allergy was found in a number of cases with symptoms of vertigo, tinnitus and deafness; the best results in treatment were obtained by the use of suitable allergic measures and histamine therapy. On the basis that the typical allergic reaction in the internal ear results in an increased quantity of endolymph with increase in endolymph pressure, the author has treated a series of cases showing Ménière's syndrome, with evidence of its allergic origin, by the administration of meralluride sodium solution—one of the newer mercurial diuretics of low toxicity—to produce dehydration. The patients were kept on a low salt diet with limitation of fluids; and the diuretic given in doses of 2 cc. every second or third day. An illustrative case is reported, which is typical of the cases in

this series, the author states. This patient had a typical Ménière's syndrome, with associated urticaria and sensitivity to some foods; in each attack the administration of the mercurial diuretic resulted in prompt improvement to a "remarkable" degree. In cases of allergy of the ear, the detection and treatment of the allergic condition should be combined with otologic therapy.

COMMENT

These allergic conditions are extremely difficult to control and as usual the crux of the situation is obtaining sufficient cooperation from the patient to bring his allergy under control. L.C.McH.

Selection of Patients for Fenestration Surgery

C. M. Kos and S. N. Reger (*Archives of Otolaryngology*, 51:707, May 1950) state that it is generally agreed that the bone conduction acuity of the patient with otosclerosis is of the "utmost significance" in determining the results of the fenestration operation and in making selection of patients for this type of operation. A method of selection is described, which the authors have found to be practical and relatively accurate. Patients in whom the diagnosis of otosclerosis has been made clinically, are classified on the basis of the audiometric tests in three classes: (1) Bone conduction hearing does not show an average loss of more than 15 decibels at cycles 512, 1024 and 2048, and the difference between air conduction and bone conduction is at least 30 decibels, if the bone conduction threshold is normal; this difference is rarely more than 60 decibels when tests are carefully made. (2) Bone conduction hearing shows an average loss of not more than 20 decibels at cycles 512, 1024 and 2048. (3) Loss in bone conduction hearing is over 20 decibels at these cycles. The fenestration operation is indicated especially, and gives the best results, in patients in class 1. Depending on individual indications, some patients in class 2 may show improvement in hearing after operation, but comparatively few will show increase in hearing to the serviceable levels of 30 decibels at the 512, 1024 and 2048 cycles. With very few exceptions, operation is not indicated for patients in class 3; the operation may be technically successful, but there is little appreciable improvement in hearing.

COMMENT

This article agrees fairly well with other articles on determining which patients are the best suited and in whom the best results are obtained by fenestration surgery. Certainly some such method of classification is very valuable to those who are doing this surgery, particularly so that patients may be properly informed as to their chances of obtaining satisfactory hearing improvement following the procedure. L.C.McH.

Blood Pressure Changes in Fenestration

M. J. Tamari and M. H. Cutler (*Annals of Otology, Rhinology and Laryngology*, 59:179, March 1950) report a study of the changes in blood pressure induced by the fenestration operation. When the blood pressure was checked before the operation and every half hour during the first twenty-four hours after operation it was found that in most cases there was a definite fall in blood pressure one to three hours after operation and that the blood pressure remained at this lower level for the twenty-four to thirty-six hours; on the third day after operation the blood pressure usually returned to the preoperative level, but in some cases in which other vegetative symptoms—vomiting, vertigo, etc. were at their peak at this time, the low blood pressure persisted for a longer period, until one week after operation. In patients under twenty-five years of age, the drop in blood pressure occurred immediately after operation and did not persist more than twenty-four hours. In cases operated on during the last month, the blood pressure was checked at the different stages of the operation; in a few cases, the blood pressure was found to fall during manipulation of the fenestra, and in 2 of these cases, the depression "became alarming" because of a

tall in the diastolic pressure to 50; the diastolic pressure in these cases returned to normal before the operation was completed, and showed the usual postoperative fall. It was also noted that in patients with relatively low preoperative blood pressure (100/70), the fall in the blood pressure was of lesser degree and shorter duration than in persons with higher preoperative pressure.

COMMENT

This report is interesting. The authors state that the blood pressure changes noted were alarming in only two cases. The usual falling blood pressure would seem to be associated with vertigo, which is usual in these cases during this period. L.C.McH.

The Local Application of "Sulfamylon" [Para-(Aminoethyl)-Benzene Sulfonamide Hydrochloride] in Otitis Externa and Chronic Otitis Media

J. W. McLaurin (*Laryngoscope*, 60:480, May 1950) reports the use of para-(aminoethyl)-benzene sulfonamide hydrochloride (sulfamylon) in the treatment of otitis externa and chronic otitis media. Sulfamylon is derived from benzalamine; it differs from sulfanilamide in having a methylene group between the benzene ring and the 4-amino group. Studies of its bactericidal action showed that it is effective against bacteria usually found in otitis externa and chronic otitis media, including *Staphylococcus aureus* and alpha and beta hemolytic streptococci; it was found that an optimal bactericidal effect is obtained with a 1 per cent solution of sulfamylon in contact with the bacteria for five minutes. In some cases of otitis externa and chronic otitis media, the type of infection can be determined by clinical examination; if not, a smear and culture are taken. If the infection is due to a fungus, sulfamylon is not employed. The ear is cleansed with tip suction, using first the smallest size Frazier suction tip and then a tip devised by the author which can be bent to reach areas inaccessible to other instruments. The ear canal is then irrigated with 95 per cent alcohol and carefully dried. Sulfamylon is then applied and the patient instructed in its use at home; with the patient lying on the unaffected side, the sulfamylon solution is instilled into the ear, and allowed to remain exactly five minutes; the ear is then dried; a cotton wick is inserted and changed as often as necessary to prevent its being saturated with the secretions; the patient is seen forty-eight hours after the first treatment. The treatment may be repeated as necessary, the patient returning to the office every forty-eight hours. When the infection is well under control, the ear is cleansed and dried, and dusted with sulfonamide powder, the patient being instructed to keep water out of the ear for three to four weeks. If the bacteriological examination, either on the first examination or subsequently, shows a pure staphylococcus infection or staphylococcus predominating, and the coagulase test is positive, sulfamylon is not used, but penicillin locally and parenterally. In a previous report, the author treated 141 ear infections in 109 patients with sulfamylon, chiefly otitis externa and chronic otitis media, but including a few cases of postoperative infection; in 93 cases the infection was controlled in seven days, and in all cases within fourteen days; there was one reaction in this series, resulting from local allergy, which cleared up promptly. A second series of 164 ear infections of the same type in 122 patients has since been treated with sulfamylon; in 80 cases, the infection was cleared up in two days, in 24, in four days and in the remainder within seven to eleven days; no reaction was observed in this series. No formal follow-up has been made but in most cases the patients have reported no recurrence of the infection.

COMMENT

This is a further report by a careful observer and if the article is studied carefully it will prove a very useful guide in the treatment of some of those very persistent infections. L.C.McH.

MEDICAL BOOK NEWS

All books for review and communications concerning Book News should be addressed to the Editor of this department, 1313 Bedford Avenue, Brooklyn 16, New York. When books are sent to us with requests for review, selections for that purpose are promptly made.

Laboratory Clinical Diagnosis

CLINICAL DIAGNOSIS BY LABORATORY EXAMINATIONS. By John A. Kolmer, M.D. 2nd Edition. New York, Appleton-Century-Crofts, [c. 1949]. 8vo. 1,212 pages, illustrated. Cloth, $12.00.

The second edition of this text has been widely revised and enlarged by the inclusion of new material as well as many additional illustrations, some in color. It has thus been brought up to date and includes such current information as the various laboratory tests concerned in the diagnosis of virus diseases; the current laboratory examinations in relation to the sulfonamide and antibiotic therapy; Rh and Hr blood factors; anti-Rh agglutinins and "blocking antibodies" in relation to pregnancy and blood transfusion, to mention a few.

The primary purpose of this book is to present the clinical interpretations of laboratory examinations and for practical applications in the diagnosis and differential diagnosis of various diseases, and to this end it has been divided into three parts—part one deals with the clinical interpretation of laboratory examinations; part two with the practical applications of laboratory examination and clinical diagnosis and part three with the actual technique of laboratory examinations.

The author's preface emphasizes that because of the skill and experience required in conducting laboratory examinations they can be neither adequately taught students in the time allowed by the medical school curriculum, nor conducted by the great majority of practitioners. This thought deserves emphasis at this time because of the tendency of the general practitioner to employ poorly trained technicians for the performance of laboratory tests in the office. There also is the indiscriminate use of poorly organized clinical laboratories run by relatively unschooled and untrained nonprofessional directors.

The book is highly recommended to medical students, practicing physicians, as well as clinical pathologists and medical technicians.

THEO. J. CURPHEY.

Amino Acids

PROTEINS AND AMINO ACIDS IN NUTRITION. Edited by Melville Sahyun, Ph.D. New York, Reinhold Publishing Corp., [c. 1948]. 8vo. 566 pages, illustrated. Cloth, $7.50.

The author has aptly stated that there is no other subject "of greater moment for the welfare of the human race" than the science of nutrition. Proteins have come into their own. This book is an excellent group of treatises on the role of the proteins in human nutrition by eighteen experts in the field. The work is well documented and authoritative as well as interesting.

GEORGE E. ANDERSON.

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Foot

DISEASES OF THE FOOT. By Emil D. W. Hauser, M.D. 2nd Edition. Philadelphia. W. B. Saunders Co., [c. 1950]. 8vo. 415 pages, illustrated. Cloth, $7.00.

The subject of diseases of the foot is not often described in a comprehensive manner.

This book presents an opportunity for the physician to gain greater knowledge of this important subject. Although the discussion would be of interest mainly to those in the field of orthopaedics, there are numerous valuable and instructive points for physicians in general practice.

Revisions and additions have been made in this second edition with particular reference to pes valgoplanus, club feet, advances in peripheral vascular disease treatment and technical improvements in the surgical correction of Hallux Valgus, hammer toe and metatarsalgia. The volume is well illustrated and clearly written.

PETER J. DULLIGAN, JR.

Surgery

INTESTINAL INTUBATION. By Meyer O. Cantor, M.D. Springfield, Ill. Charles C. Thomas, [c. 1949]. 8vo. 333 pages, illustrated. Cloth, $7.50.

This book gives an excellent review of the literature plus the extensive personal experiences of the author. At present it constitutes the ABC of intestinal intubation. The various long decompression tubes are described and the advantages and disadvantages of each are enumerated. The description of the technique of intubation with all the variations, impediments and pitfalls is unexcelled.

A review of the indications and contraindications to the use of long intestinal tubes forms interesting reading as does the historical background, nursing care of the patient, and altered physiology of intestinal obstruction.

Every gastrointestinal surgeon should add this book to his collection.

CESARO CASTELLANETA.

Ultramicroanalysis

QUANTITATIVE ULTRAMICROANALYSIS. By Paul L. Kirk, Ph.D. New York, John Wiley & Sons, [c. 1950]. 8vo. 310 pages, illustrated. Cloth, $5.00.

The contents of this book represent an outstanding summary of the present status of Ultramicro Quantitative Analysis. The methods deal with the analyses for micrograms (1 microgram = 0.001 mg) of components. The volume of liquid sample used is from 5 λ to 100 λ (λ = Lambda = 0.001 mg.) The book covers volumetric, colorimetric, spectrophotometric and gasometric analyses. The author himself is responsible for making a number of fundamental contributions. Among the applications of ultramicro analysis he describes methods for the analysis of blood components like calcium, sugar and Kjeldahl nitrogen. The principles may be adapted to reduce the sample required for other determinations of interest to the clinician and research worker. It is possible to do multiple analyses on fingertip blood.

The reviewer has employed ultramicromethods for over a decade with great satisfaction on the part of the medical staff, especially the pediatricians (and the patients). The methods save space and time, without loss of precision. This book is a *must* for the chemistry department of a modern hospital and is recommended for the investigator in the biological sciences.

ALBERT E. SOBEL.

Heart

A MANUAL OF CARDIOLOGY. By Thomas J. Dry, M.D. 2nd Edition. Philadelphia. W. B. Saunders Co., [c. 1950]. 12mo. 355 pages, illustrated. Cloth, $5.00.

Dry's *Manual of Cardiology* is a first rate synopsis of cardiology characterized by commonsense and clarity. The section on congenital heart disease is especially good. This small volume may be commended to anyone interested in a brief résumé of heart disease.

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REFERENCES

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MODERN THERAPEUTICS

Anathion in the Treatment of Arthritis

Anathion (sodium tetrathiodiglycollate) was administered to 34 patients suffering with rheumatoid arthritis (25), osteoarthritis (4), and fibrositis (5). Injections were given intravenously every other day in an amount of 10 mg. of Anathion. Before therapy was started complete blood counts and sedimentation rates were determined on most of the patients. No other medication was given during the period of treatment. Four of the patients showed only slight improvement but all of the others showed moderate to excellent improvement, based upon subjective symptoms including swelling, pain, degree of mobility of the joints, and the general condition of the patient.

Libenson and Wittenborn, writing in the *J. Med. Soc. N. J.* [47:105 (Mar. 1950)], stated that none of the patients exhibited any toxic symptoms. One of the patients received over 60 injections. Improvement was noted after as few as 5 injections but in some of the cases of long duration as many as 35 injections were required before improvement was noted. The compound acts by the release of molecular sulfur at the tissue level following the intravenous injection of a freshly prepared solution. This sulfur reacts with the sulfhydryl compounds in the tissues producing both hydrogen sulfide and -S-S- compounds but without irreversibly blocking and destroying the sulfhydryl compounds, as gold salts.

Treatment of Acne

Acne vulgaris was treated in 100 cases with a regimen designed to be applied in any doctor's office. The face was washed twice in succession with hot water and soap which was followed with a cold rinse. Immediately the face was dried without undue rubbing and Acnomel, a topical preparation containing 2 per cent resorcinol, 8 per cent sulfur, and 11 per cent alcohol in a flesh-tinted, non-greasy base, was applied. According to Dexter in *J. A. M. A.* [142:715 (Mar. 11, 1950)] the acne was either arrested or decidedly improved in all cases. The severity of the condition and the time necessary for treatment to show improvement in the condition showed no consistent relation.

Aggravating factors were found to be dietary and cosmetic habits; the way a patient customarily leans his face against his hand; emotional tension; a few drugs taken for other conditions, such as iodides, bromides, and testosterone; and occupational contact with oil and grease.

Treatment of Pruritis Ani and Pruritis Vulvae

Pruritis ani and pruritis vulvae are common diseases which are extremely annoying to the patients because of the intolerable itching. In this series there were 168 cases. The treatment schedule involved rigid cleanliness, elimination of the causative factor if determinable, and sitz baths of potassium permanganate or boric acid in some cases. An ointment, Iso-Par, composed of hydroxybenzyl nonaromatic amines and acidic oxidation products of petroleum hydrocarbons in a hydrophobic ointment base, was applied lightly at bedtime. In 127 of the cases this treatment was combined with a dose of 38 to 50 r of low voltage (100 kilovolts) unfiltered radiation every 2 or 3 weeks.

Writing in *Arch. Dermatol. Syphilol.* [59:243 (1949)] Driver, Cole, and Cole, Jr. stated that cure or symptomatic relief was obtained in 107 of the 127 cases receiving the combined treatment and im-

—Continued on page 58a

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Extra-high B Complex and C potencies'
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[1]*Potencies and balance cover latest standards for multiple therapeutic dosage. 1. Rehabilitation Through Better Nutrition*, 1947—Spies. *2. Journal of American Medical Association*, Oct. 27, 1945; 129:613—Jolliffe. *3. Vitamin Deficiencies: Stigmas, Symptoms and Therapy* (J. A. M. A., June 22, 1946; 131:666—Council on Foods and Nutrition).

immediate relief within hours itching, burning halted; within 3 to 6 days discharge ceases.

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—Continued from page 56a

provement in 29 of the 41 patients receiving treatment with the ointment alone. In 22 of the cases there was little or no improvement and in 10 cases the ointment caused exacerbation of the symptoms. As a rule better results were obtained in the treatment of pruritus ani than in that of pruritis vulvae.

Clinical Trial of Phenylindanedione, a Prothrombopenic Drug

The new anticoagulant 2-phenyl-1, 3-indanedione was given to 53 patients who had had thrombotic episodes. The dosage required was determined by trial and error. The conclusion from this series was that an initial dose of 200 mg. of phenylindanedione produced adequate results, but that an initial dose of 50 mg. with 100 mg. the next day was not adequate. The average daily maintenance dose in the 53 patients was 65 mg. In 38 of the 53 patients the prothrombin activity had been reduced to 25 to 30 per cent within 28 hours under this dosage schedule. Blaustein, Croce, Alberian, and Richey, writing in *Circulation* [1:1195 (May 1950)], stated that the effect of phenylindanedione was intermediate between that of heparin and that of dicoumarin. The prothrombin level returned to its original level in an average of 48 hours after the drug was withdrawn.

Massive Dosage of Vitamin D

The administration of massive doses of vitamin D in the treatment of rheumatoid arthritis is not without danger. Addis and Currie reported in *Brit. Med. J.* No.

—Continued on page 60a

400% more cholesterol in coronary arteries

postmortem studies reveal 4 times greater cholesterol content of coronary arteries in fatal coronary thrombosis[1]

"The average cholesterol content of the coronary arteries in a group of patients who died from an acute coronary artery thrombosis was four times as great as the average cholesterol content of the coronary arteries in a comparable group of control patients."

"Hypercholesterolemia was found in most of the patients who died of acute coronary artery thrombosis, as compared to a normal blood cholesterol average in the comparable control group."[1]

Accumulating evidence shows that lipotropic therapy will reduce elevated blood cholesterol levels[2,3,4] . . . and even may "prevent or mitigate" cholesterol depositions in the intima of blood vessels in man and animals.

It has already been reported that in patients who have had acute coronary occlusion, lipotropic therapy may significantly prolong life over an untreated group with the same diagnosis.[5]

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suggested daily therapeutic dose of 9 capsules or 3 tablespoonfuls provides:

Choline Dihydrogen Citrate	2.5 Gm.*
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Liver fractions from	36.0 Gm. liver

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write for samples and literature

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2. Herrmann, G. R.: Exp. Med. & Surg. 5:149, May-Aug. 1947.
3. Leinwand, I. and Moore, D. H.: Amer. Heart J. 38:3, Sept. 1949.
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5. Morrison, L. and Gonzales, W. F.: Amer. Heart J. 38:671, Sept. 1949.

—Continued from page 58a

4658:877 [Apr. 15, 1950)] two cases of toxicity from vitamin D. One patient had been taking 200,000 i.u. of calciferol daily for about a year and the other had been taking 600,000 i.u. twice a week for about a year. In both cases the symptoms beyond those from the arthritis alone were pain in the neck, loss of appetite, and nocturnal frequency of micturition. However, the best available indication of toxicity seems to be the detection of hypercalcemia. It has been suggested that a level of diffusible serum calcium of 7.5 mg. per 100 cc., or over, is indicative of the imminence of toxicity.

Treatment consists of the immediate withdrawal of the vitamin D, forcing of fluids, and the intravenous administration of 250 cc. of 2.5 per cent sodium citrate solution. Usually there is a rapid disappearance of symptoms but the blood calcium will probably remain high for some time. Renal damage frequently occurs before toxicity can be diagnosed, therefore, after the diagnosis is established it is necessary to conduct frequent renal function tests. In view of the necessity for close laboratory control and the dangers involved the authors question whether or not the treatment of rheumatoid arthritis with massive doses of vitamin D is justified.

Vitamin B_{12} in Macrocytic Anemia of Pregnancy

Previous reports of the treatment of macrocytic anemia of pregnancy with vitamin B_{12} had not been to encouraging. Patel and Kocher reported the results they obtained in 5 cases. In 4 of the cases a single intramuscular injection of 40 micrograms of vitamin B_{12} was given

—Continued on page 62a

now ... turn the love for sweets to therapeutic advantage in obesity!

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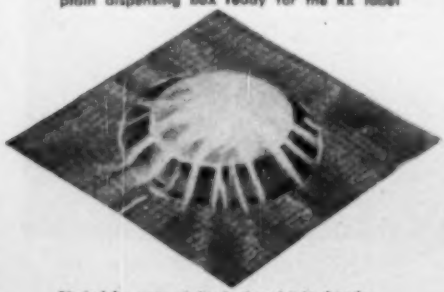

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MODERN THERAPEUTICS

—Continued from page 60a

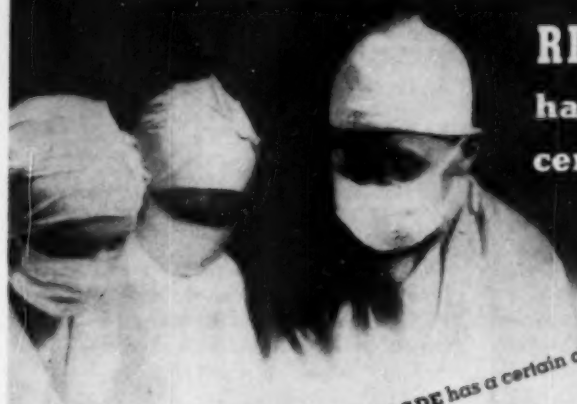
and in the fifth case 20 micrograms were given. The patients were then observed for a period of 14 days. In every case there was prompt improvement. In the first case reported by the authors in *Brit. Med. J.* [No. 4659:924 (Apr. 22, 1950)] the dose proved to be suboptimum. In this case the response was optimum on the tenth day and declined to the eighteenth day. Also, the bone marrow failed to be completely converted to a normoblastic picture. The patient receiving 20 micrograms of the vitamin had a partial and temporary response. In this case when the dose was increased to 40 micrograms the response was suboptimum. From the results obtained with these 3 patients the authors concluded that 40 micrograms or more given in a single intramuscular injection are necessary to produce an optimum response during a period of 10 days in patients with macrocytic anemia of pregnancy. In cases of Addisonian pernicious anemia it has been found that the optimum response is obtained with about 1 microgram a day.

DHE 45 in Relief of Pain in Shingles

Patients suffering with shingles in various stages of development were given an average of 4 to 6 cc. of dihydroergota-

—Continued on page 64a

Through the years the name B-P RIB-BACK BLADE has come to mean certain things to the SURGEON



A B-P RIB-BACK BLADE has a certain character that is all its own.

A B-P RIB-BACK BLADE is uniformly sharp throughout its entire cutting edge.

A B-P RIB-BACK BLADE'S rib-reinforcement, an exclusive feature, provides greater strength.

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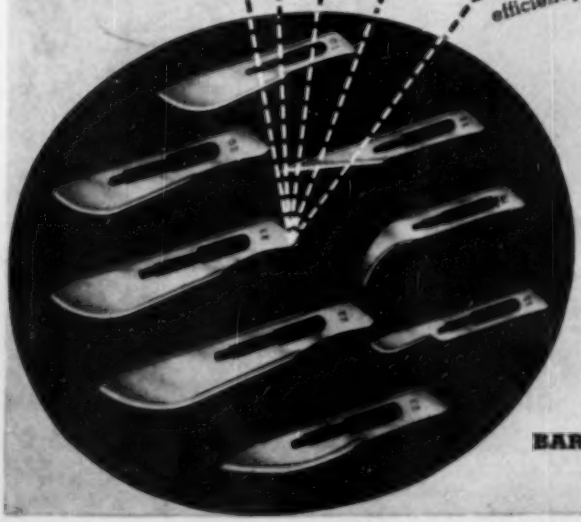

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MODERN THERAPEUTICS

—Continued from page 62a

mine methanesulfonate at intervals of 12 hours to 4 days as needed for relief, by either intramuscular or intravenous injection. Combes, Canizares, and Simuangco reported in *J. Invest. Dermatol.* [14:53 (1950)] that 30 out of 40 patients with shingles were relieved in as little as 15 minutes following the injection. The results were classified as excellent in 17 cases, satisfactory in 13 cases, and failure in 10 cases. Most of the latter also had other complicating conditions. The poorest results were obtained among those patients who had been suffering from shingles for a long period of time. The relief from pain lasted for periods varying between 8 hours and 3 days in the group obtaining excellent results. In the group obtaining satisfactory results the relief from pain was not complete in many cases, however, in most of these cases a second injection of a higher dosage produced satisfactory results.

The vesicles, symptomatic of the disease, ran their normal course and were unaffected by the drug. Few side effects from the drug were noted.

Para-Aminosalicylic Acid in Tuberculosis

The use of para-aminosalicylic acid (PAS) in the treatment of patients with various types of tuberculosis was discussed by Carstensen in *Am. Rev. Tuberc.* [61:613 (May 1950)]. In a group of 150 patients with moderate or far-advanced

—Continued on page 66a

PSORIASIS has him baffled

until he resorts to

RIASOL

Many a doctor groans with dismay when he sees a patient with psoriasis. Even dermatologists admit that psoriasis is exceedingly resistant to treatment.

Recent clinical investigations have proved, however, that RIASOL clears or improves the ugly skin patches of psoriasis in 76% of cases. Often there is complete disappearance of the cutaneous lesions with prolonged remissions.

RIASOL actually reaches the corium and the deeper layers of the epidermis. Its therapeutic action is evidenced by gradual fading of the red patches and disappearance of the accumulated silvery scales.

RIASOL contains 0.45% mercury chemically combined with soaps, 0.5% phenol and 0.75% cresol in a washable, non-staining, odorless vehicle.

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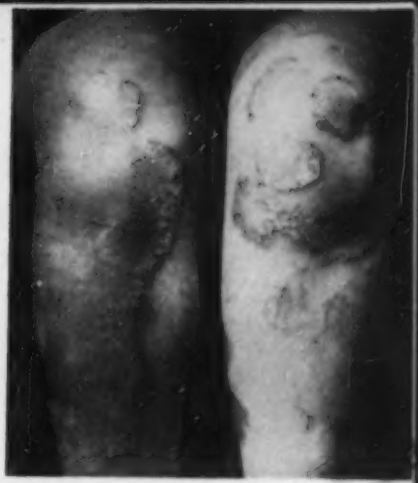
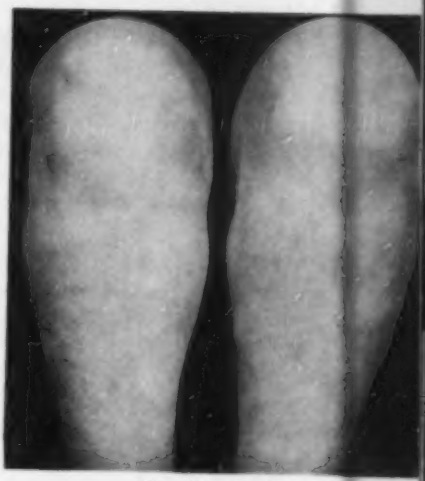


Before Use of Riasol



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RIASOL for PSORIASIS

—Continued from page 64a

pulmonary tuberculosis 99 were improved, 46 remained unchanged, and 5 became worse during oral treatment with 10 to 18 Gm. PAS a day (or the sodium salt) for 1 month to 1 year. Ten of 79 tested showed a development of drug resistance but not until more than 184 days. The cavities of 22 of 128 patients closed but reappeared in 8 of these during the subsequent year. Collapse treatment was given to 7 and no evidence of cavitation appeared in these. Examination 1 year after treatment showed that the disease was apparently cured in 33, arrested in 8, still active in 37, 59 had undergone operations, and 14 had died.

At the same dosage levels, PAS for a period of 3 to 14 months apparently cured 5 with skin tuberculosis, 3 of 4 with tuberculosis otitis, and 1 of 7 with renal tuberculosis and brought some improvement to those not cured. PAS alone or in combination with streptomycin brought good results in a limited number of patients with peritoneal tuberculosis, miliary tuberculosis, and tuberculous empyema and poor results in a few patients with tubercular meningitis. The principal side effects seemed to be mild nausea, heartburn, and diarrhea.

Comparison of the Protective Effect of Flavonoids and Vitamin C on Radiation Sickness in Dogs

A group of 37 dogs that were irradiated with 350 roentgen units had a

—Continued on page 68a

One of a series of reports on

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Key to a New Era in Medical Science

THE CLINICAL RESPONSE
In RHEUMATOID ARTHRITIS
And Its VARIANTS

Among the conditions in which Cortone has produced striking clinical improvement are:

RHEUMATOID ARTHRITIS and Related Rheumatic Diseases

ACUTE RHEUMATIC FEVER

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EYE DISEASES, Including Nonspecific Iritis, Iridocyclitis, Uveitis, and Sympathetic Ophthalmia

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THE usual pattern of response to CORTONE begins with diminution in subjective stiffness, commonly within 24 to 48 hours, but sometimes within 6 hours after the initial dose. In many cases this symptom is significantly or completely relieved within a few days. Next, articular tenderness and pain on motion decrease. Finally, swellings of the joints diminish, sometimes fairly rapidly and completely, but occasionally more slowly and incompletely.

In many patients, mild soft-tissue deformities of the knees or elbows have disappeared within 7 to 10 days. An increase in muscle strength has been reported. The extent of return to normal has been limited, as must be expected, by the degree of permanent pathologic change present.

Appetite usually improves rapidly, and many patients have described a loss of the feeling of malaise associated with the disease and have experienced a sense of well-being, occasionally within several hours after initial administration of the drug.

When treatment with CORTONE is discontinued, signs and symptoms may begin to reappear within 24 to 48 hours, becoming gradually worse during the following 2 to 4 weeks. The degree of relapse varies, and is apparently unrelated to the duration of treatment. In some patients, however, the greater part of the remission has persisted for as long as several weeks or months. If CORTONE is re-administered when manifestations of the disease return, prompt remission is again induced.

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(11-Dehydro-17-hydroxycorticosterone-21-Acetate)

*Trade-mark of Merck & Co., Inc. for its brand of cortisone.

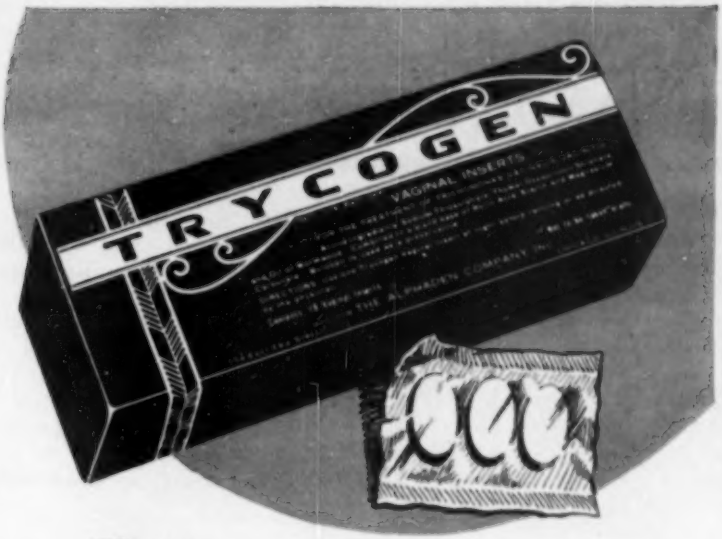
MODERN THERAPEUTICS

—Continued from page 66a

fatality of 22 in an average of 20 days. The oral administration of 50 mg. of rutin, hesperidin, or epim-catechin three times a day for five weeks beginning one week prior to irradiation reduced the mortality rate of 11, 17, and 10 per cent respectively. Hesperidin methyl chalcone, esculin, quercitin, quercitrin, naringin dihydroxyphenylalanine, and sodium gentisate had no effect on the mortality rate, according to Field and Rekers in *J. Clin. Invest.* [*28*:746 (July, 1949)]. Coumarin reduced the mortality rate to 33 per cent while morin and homoeriodictyol prevented death in 5 and 6 dogs, respectively. Ascorbic acid alone, given to 12 dogs in doses of 100 mg. three times a day on the same five-week schedule, prevented the death of only 50 per cent of the dogs. However, the administration of 50 mg. of quercitin with the ascorbic acid reduced the mortality rate of 10 per cent.

Oral Procaine in Asthma

A girl, 18 years of age, with severe intractable asthma who had failed to respond to any accepted remedy and who had previously experienced violent side reactions upon the intravenous administration of procaine, received 10 gr. of procaine 4 times a day orally. This dose was increased to 12½ gr. 4 times a day after 10 days and finally was changed to 25 gr. before arising and 12½ gr. before retiring. Schapiro and Sadove, reporting in *Ann. Allergy* [*8*:85 (Jan. Feb. 1950)] stated that the girl experienced her last attack 16 days after the start of therapy and was still completely free of attacks 5 months later. Withdrawal of the drug resulted in a return of respiratory symptoms, which were aborted immediately by the oral administration of procaine. The authors also reported that there were no side reactions.



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In trichomonal, monilia, or senile vaginitis, TRYCOGEN acts to destroy the parasitic invaders, relieve the pruritus, and restore the normal vaginal flora.

TRYCOGEN presents sodium thiosulfate, thymol, oxyquinoline sulfate and oil of wormwood in a base of boric acid and starch. Non-irritating; non-staining.

Trycogen Inserts, Boxes of 18 and 100 • Trycogen Powder, 25-gram vials. Also in 8-oz. and 16-oz. containers.

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NEWS AND NOTES

Appointments and Awards

Selection of Dr. Fuller Albright, associate professor of medicine at Harvard Medical School, Boston, as recipient of the 1950 Joseph Goldberger award in clinical nutrition was announced recently by the Board of Trustees of the A. M. A.

The award, made annually by the A.M.A. to stimulate research in nutrition, consists of a gold medal and $1,000 in cash, and goes this year to Dr. Albright for his work in mineral metabolism and in human metabolism as influenced by the endocrine glands.

Appointment of Mrs. Hale C. Pragoff as medical social work consultant to the National Society for Crippled Children and Adults has been announced by Lawrence J. Linck, executive director.

Appointment of Dr. D. A. Dukelow, Chicago, health education consultant for the A.M.A., to assist in the preparation of health data for the Midcentury White House Conference on Children and Youth was announced recently by Melvin A. Glasser, Washington, D. C., executive director of the conference.

Dr. Loyal Davis, Grunow professor of surgery and chairman of the department at the Northwestern University Medical School, has been selected to represent the American College of Surgeons in the division of medical science on the National Research Council, it was announced recently. Dr. Davis' appointment is for a period of three years.

Medicinal Chemist Predicts Triumph Over Cancer

Eventual triumph over cancer was predicted recently by Dr. Ernest E. Campaigne, Indiana University chemistry professor, now on the summer faculty of Northwestern University.

Speaking at a public lecture on Northwestern's Evanston Campus, Dr. Campaigne said he believes the dread disease will finally yield to scientists and investigators.

"Already one compound, quanizolo, has been found which selectively attacks the cancer cell," the medicinal chemist declared.

"It is weak in action, and as soon as treatment is stopped, the cancer begins growing again, but the possibility is proven." Prof. Campaigne said it only remains to find the right key for the lock.

The American Chemical Society

Dr. N. Howell Furman, Russell Wellman Moore Professor of Chemistry in Princeton University, who developed new analytical techniques needed for the atomic bomb project, is the president elect of the American Chemical Society. He will head the Society in 1951.

President for 1950 is Dr. Ernest H. Volwiler, executive vice-president of Abbott Laboratories, North Chicago, Ill., who took office on January 1, succeeding Dr. Linus Pauling of the California Institute of Technology.

To the new president-elect will fall the honor of leading the Society during the celebration of its diamond jubilee in the fall of 1951, at which time American chemists also will be hosts to the Sixteenth Conference of the International Union of Chemistry and the Twelfth International Congress of Pure and Applied Chemistry.

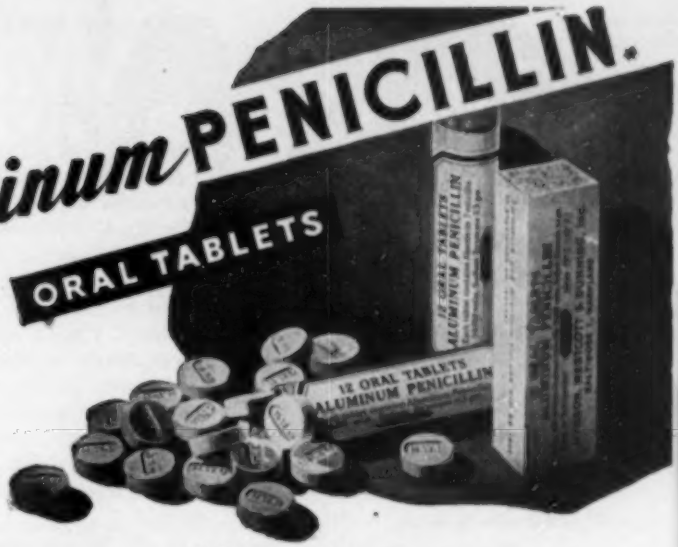
New Clinical Pathology Laboratory in Georgia

A model clinical pathology laboratory, with certain services available to the entire United States, is being set up in Atlanta by three independent health agencies.

—Continued on page 72a

Aluminum PENICILLIN.

ORAL TABLETS



Greater effectiveness

Oral therapy with Aluminum Penicillin has proved to be effective in fulminating infections such as pneumonia[1] and in other infections due to streptococci, staphylococci and gonococci.[2] It rarely causes gastric disturbance or allergic reactions. The patient's bodily and mental comfort is improved because the necessity for frequent injections is eliminated.

The unique advantages of Aluminum Penicillin are that it is not soluble in solutions of acidity corresponding to that of gastric secretion, but is gradually converted into a readily absorbed form in the intestinal tract. These factors provide for maximum utilization of the dosage administered, higher and more prolonged blood levels.[3]

Sodium benzoate is added because it inhibits the destructive action of intestinal enzymes.[4]

Oral Tablets

Each tablet contains: Aluminum Penicillin, 50,000 units; sodium benzoate, 0.3 gram. Supplied in vials of 12 tablets.

[1]Terry, L. L. and Friedman, M. The Military Surgeon, Vol. 103, No. 5, November, 1948.
[2]Friedman, M. and Terry, L. L. Southern Medical Journal, Vol. 42, No. 6, June, 1949.
[3]Bohls, S. W. and Cook, E. B. M. Texas State Journal of Medicine, Vol. 41, November, 1945, p. 342.
[4]Reid, R. D., Felton, L. C. and Pitroff, M. A. Prn. Soc. for Exp. Biol. and Med., Vol. 63, 1946, p. 438.

• Patent applied for.

HYNSON, WESTCOTT & DUNNING, INC.
Baltimore, Maryland

NEWS AND NOTES

—Continued from page 70a

Establishment of the new medical laboratory was revealed today in a joint announcement by the following officials:

Dr. R. A. Vonderlehr, medical director in charge, Communicable Disease Center, Public Health Service; Mr. Frank Wilson, superintendent, Grady Memorial Hospital; and Dr. R. Hugh Wood, dean, Emory University School of Medicine.

Objectives of the research center, according to the announcement, are: (1) To develop, through research, more reliable methods for clinical laboratories; and (2) To educate and train laboratory personnel.

Dr. F. William Sunderman, nationally recognized investigator in experimental medicine, heads the laboratory. Dr. Sunderman is president-elect of the American Society of Clinical Pathologists and author of a leading textbook.

"This is the first laboratory of its kind anywhere linking the hospital ward, the dispensary, and the clinic with the field work of public health," he declared.

"Clinical medicine is the study and treatment of disease in the individual; public health is the prevention of disease, both in the individual and in the community.

"Laboratory medicine, or clinical pathology, as it is sometimes called, is the common denominator which binds together both clinical medicine and public health."

Death Rate Lower for Two Diseases

Despite a widespread outbreak of influenza and pneumonia, the lowest first-quarter death rate on record for the two diseases was established during the first three months of 1950, according to the experience among the industrial policy-

—Continued on page 74a

...released

Safely

Whether or not the diverse etiology of tension may embrace emotional symptoms or smooth muscle spasm, HOMADONNA—the modern sedative-antispasmodic—has been formulated to meet the patient's urgent need for *prompt*, *safe* relief.

Prompt . . . because the spasmolytic agent of HOMADONNA has an action on gastric secretion and pyloric spasm comparable to atropine.

Safe . . . because this antispasmodic, homatropine methylbromide is less than one thirtieth as toxic as atropine. Furthermore, in addition to allaying nervous tension, the sedative action of HOMADONNA serves to enhance its antispasmodic action.

Your next case of pylorospasm, peptic ulcer, subacute gastritis, cardiospasm or spastic colitis will present a splendid opportunity to judge HOMADONNA in action. It is also suggested in the control and treatment of dysmenorrhea.

SUPPLIED:

HOMADONNA ELIXIR
in pint bottles.

HOMADONNA TABLETS
in bottles of 100, 500 and 1000.

Each creased tablet or fluidram (4 cc.) of palatable elixir contains:

Phenobarbital	**¼ gr. (16 mg.)**
Homatropine Methylbromide	**1/26 gr. (2.5 mg.)**

HOMADONNA

VB

VANPELT & BROWN, INC. *Pharmaceutical Chemists* **RICHMOND, VIRGINIA**

—Continued from page 72a

holders of the Metropolitan Life Insurance Company.

The death rate was 23.2 per 100,000, as compared with 26.3 for the first three months of last year. The rates were 50.0 and 78.6, respectively, for the first quarters of 1946 and 1944, the two most recent years when influenza was epidemic.

General health conditions continued at last year's favorable level, the company's statisticians report, with the over-all death rate among the policyholders 6.8 per 1,000, identical with the all-time low recorded in the same period of 1949.

New low first-quarter death rates were also recorded for tuberculosis, the principal communicable diseases of childhood as a group, syphilis, appendicitis, gastritis, and the complications of pregnancy and childbirth.

By contrast, slight increases—as compared with last year—were shown in the mortality from the diseases of the heart, arteries and kidneys, which account for approximately half of all of the deaths among the policyholders, and in the mortality from cancer, which ranks second among the causes of death.

Brain Tumors Located With Geiger Counter by N. U. Surgeons

Northwestern University surgeons have developed an extremely accurate method of locating brain tumors by using a radioactive tracer dye and a skull Geiger counter, it was revealed recently at a meeting of the American Neurological Association.

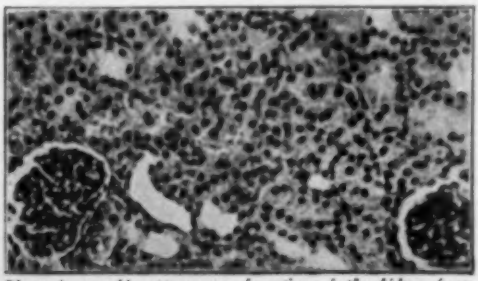
Reporting on clinical use of this new technique, Dr. John Martin said 95 percent accuracy was recorded in examining 200 patients at the Northwestern Medical

—Continued on page 76a

PHENOLPHTHALEIN AND THE KIDNEY

FANTUS and others[1,2,3] found that phenolphthalein is not irritating to the kidneys. In 4500 tests of the urine from hospitalized patients receiving phenolphthalein, there was not a single case of albuminuria. Indeed, when albuminuria existed, improvement followed the use of phenolphthalein.

By administering repeatedly 200 times their individual threshold dose of phenolphthalein to rhesus monkeys, the clinical observations of these investigators were biologically confirmed. When the test animals were sacrificed, the kidney tissues were found to be normal, without any grossly or microscopically discernible pathologic changes.



Photomicrographic appearance of section of the kidney from monkey receiving 200 times its threshold dose of phenolphthalein. No pathologic changes present.

The liver and intestinal tract were also intact, and in the animals not sacrificed, all these organs continued to function normally throughout their life span.

The rhesus monkey is the most suitable test animal for the biological evaluation of the laxative efficiency of phenolphthalein[4], because it responds in a similar way as humans.

These findings of the pharmacological study furnish impressive evidence of the wide margin of safety of phenolphthalein, above therapeutic requirements.

The phenolphthalein used in Ex-Lax is biologically standardized to assure its effectiveness. Unusual palatability is imparted to Ex-Lax by its chocolated base, making this laxative readily acceptable when agreeable taste is an important consideration, as during pregnancy and in administration to children.

The laxative action of Ex-Lax is satisfyingly thorough, without excessive effect or embarrassing urgency. In appropriate doses, Ex-Lax is equally suitable for adults and children. Its use by many physicians in their practice is a most significant expression of confidence in the therapeutic merits of Ex-Lax as an all-around laxative.

A trial supply of Ex-Lax and literature will be sent gladly to physicians. Ex-Lax, Inc., Brooklyn 17, New York.

---

1. B. Fantus and J. M. Dyniewicz: J.A.M.A. 108:439-443, Feb. 6, 1937.
2. M. L. Blatt, F. Steigmann, and J. M. Dyniewicz: J. Pediatrics 22:719-725, June, 1943.
3. W. A. Bastedo: Pharmacology, Therapeutics and Prescription Writing, Saunders, 1947, pages 201-202.
4. S. Loewe: J. Am. Pharm. Assn. Vol. 28, No. 7, July, 1939—K. A. Bartlett and R. H. Herbine: ibid.

NEWS AND NOTES

—Continued from page 74a

School and the Veterans Administration Hospital at Hines, Ill.

The Geiger counter method, Dr. Martin pointed out, proved to be much more accurate than two other methods used in past years to locate brain tumors. While the Northwestern technique produced 95 percent accuracy, electroencephalography (measuring the electrical charge of brain waves) was only 60 percent accurate, and pneumography (brain cavities are filled with air, and X-rays are taken) was 80 percent accurate.

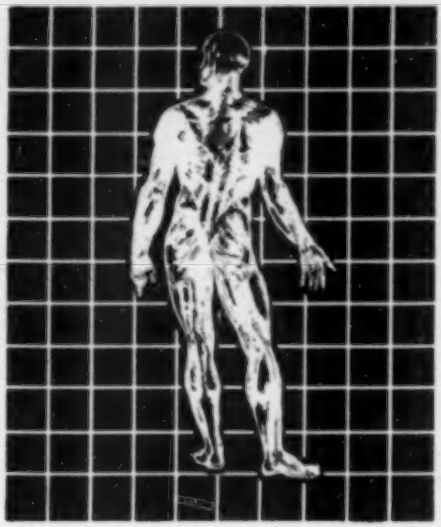
The report was prepared by Dr. Martin and four other members of the Northwestern Department of Surgery, Dr. Loyal Davis, Dr. George V. LeRoy, Theodore Fields, and Dr. Moses Ashkenazy.

The new method, one of the most noteworthy results of atomic research, was described as "a simple, safe, painless and reliable method for the localization and diagnosis of brain tumors."

The radioactive tracer dye used by the Northwestern surgeons was fluorescein, which in solution is injected into the patient's blood stream. The dye concentrates only in the tumor tissue. Attached to the patient's head is a Geiger counter device shaped somewhat like a skull cap and equipped with a counter that can be moved to 32 different positions. The counter, in turn, is connected to a graphic recorder.

The surgeon moves the counter across the areas of the skull and when the pinpoint location of a tumor is reached, the recorder shows that the rays from the radioactive fluorescein are emanating from the tumor.

—Continued on page 78a



Your Patient Has 18 to 20 Square Feet of Surface Skin!

The average human body has a surface skin area of 18 to 20 square feet—and every inch is at all times susceptible to one skin disorder or another.

Fortunately, a dermatologic cream exists which is highly effective in alleviating many of these conditions.

Tarbonis

THE ORIGINAL CLEAN WHITE COAL TAR CREAM

All the Therapeutic Advantages of Crude Coal Tar with Irritating Residues Removed

Of 51 difficult dermatologic cases recently treated with TARBONIS in a 5-week to 5-month period, 54.9% cleared or showed marked improvement.* 25.5% showed good response. TARBONIS brought satisfactory results in 80.4% of the patients! *41 cases involved conditions of 2 to 10 years duration, not yielding to other therapy!*

	CASES	CLEARED OR MARKED IMPROVEMENT	MODERATE IMPROVEMENT	SLIGHT OR NO IMPROVEMENT
CHRONIC RECURRENT CONTACT DERMATITIS	11	9	1	1
PSORIASIS	11	2	4	5
NEURODERMATITIS	5	3	2	–
ATOPIC ECZEMA	8	6	1	1
SEBORRHEIC DERMATITIS	6	5	1	–
VARICOSE ECZEMA	4	1	1	2
ALLERGIC DERMATITIS	3	–	2	1
LICHEN PLANUS	3	2	1	–
TOTAL	51	28	13	10
%		54.9	25.5	19.6

For prescriptions—all pharmacies stock 2¼-oz. & 8-oz. jars; for dispensing purposes, 1-lb. & 6-lb. jars available thru your surgical supply dealer.

**Lowenfish, F.P., N.Y. State J. Med., 50:922 (Apr. 1) 1950.*

THE TARBONIS COMPANY Dept. M.T.
4300 Euclid Ave., Cleveland 3, Ohio

Please send literature and clinical sample of TARBONIS

NAME _____ M.D.

ADDRESS _____

CITY _____ ZONE ____ STATE _____

NEWS AND NOTES

—Continued from page 76a

Not only is the Geiger counter method important in locating brain tumors, Dr. Martin reported, but it also is just as accurate in determining the absence of tumors in patients possessing symptoms of tumors. In negative diagnosis, the Northwestern procedure produced accuracy of 95 per cent, the same results as in the positive diagnoses.

Whiting Mansion Acquired by International College of Surgeons

Full title to the former Whiting mansion, 1524 Lake Shore Drive, Chicago, was acquired recently by the International College of Surgeons with the recording in the county recorder's office of a deed to the property.

Long the scene of brilliant social settings, the Whiting mansion will now play an internationally important part in the world of medicine.

Title to the property was cleared with the conveyance by Lawrence H. Whiting of his equity in the property of the International College of Surgeons.

This will extend the facilities of the College more than 100% as the newly-acquired building is larger than the College's present address next door at 1516 Lake Shore Drive.

Benefits of Rehabilitation for Chronically Diseased are Revealed

At least half the patients now filling hospital beds because of the disabling aftermaths of chronic diseases could be rehabilitated and discharged, able to care for their personal needs, and in many cases to earn some sort of living, it was announced recently at Goldwater Memorial Hospital. The figures were revealed by hospital and medical authorities

—Continued on page 80a

prompt symptomatic relief in hay fever

Your hay-fever patient wants most of all the ability to breathe normally—so that he can eat and enjoy it, sleep and be rested, work and play unhandicapped. For him, you can recommend Benzedrex Inhaler and be virtually sure that it will free him promptly of hay fever's most annoying symptoms.

Benzedrex Inhaler
has four outstanding advantages:

1. More rapid vasoconstriction
2. More prolonged vasoconstriction
3. Clean, medicinal odor
4. No excitation or wakefulness

Smith, Kline & French Laboratories, Philadelphia

Benzedrex Inhaler

the best inhaler ever developed

'Benzedrex' T.M. Reg. U.S. Pat. Off.

—Continued from page 78a

upon completion of the first year of operation of a project described as the first mass attempt to rehabilitate patients in a hospital devoted exclusively to chronic diseases.

The announcement of these findings concerning the effectiveness of modern medical and rehabilitation techniques when used in connection with persons disabled by chronic diseases, and their significance in view of the aging population of the country, were released jointly by Dr. Marcus D. Kogel, New York City Commissioner of Hospitals, and Dr. Howard A. Rusk, Professor and Chairman of the Department of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center.

The data upon which the announcement was based was compiled at Goldwater Memorial Hospital, a municipal hospital on Welfare Island in the East River, devoted solely to the care of persons with chronic diseases.

Hearing Clinic Opens in Philadelphia

A clinic to provide the hard of hearing patient and his physician with facilities for auditory testing and training has been established in Philadelphia.

Known as The Philadelphia Better Hearing Clinic, with headquarters at 214 South 16th Street, the new cilinic's facilities are available to educators, psychologists, sociologists, otologists and research workers without charge (except for purchase of equipment), as well as to physicians and their patients. The latest styles in hearing aids will be on display for inspection and comparison of their relative merits.

A major objective of the clinic, according to Paul E. Gardner, director, is "To promote a more intelligent, enlightened scientific and ethical handling of the problems of the hard of hearing."

"Today the patient with a hearing loss," said Mr. Gardner, "is one of our most neglected patients. He is left alone to work out the solution to his hearing problem and as a result he is an easy target for the misleading claims of unscrupulous advertisers. He needs professional, unbiased medically approved guidance, and it is to supply this need that The Philadelphia Better Hearing Clinic has been established."

Catastrophe Death Toll Rises

Catastrophic accidents—those in which five or more persons are killed—took about 700 lives in the United States in the first half of 1950, or about 100 more than in the like period of last year, according to a survey by the statisticians of the Metropolitan Life Insurance Company.

This increase reflects the greater number of major disasters this year than last. In the first six months of 1950 there were seven disasters each of which claimed 25 or more lives, taking a total of 267 persons. In the corresponding period of 1949 there were three such disasters, killing 159 persons.

poise . . .

. . . in women, is usually a synthesis of both physiological and psychological equilibrium.

The ability of TYREE's Antiseptic Powder to restore physiological equilibrium or to overcome many common pathological conditions stresses the value of professionally recommending this ethically promoted douche powder.

The detergent action of TYREE's Antiseptic Powder assures thorough cleansing in routine hygiene and its cooling essential oils afford a soothing sense of relief to delicate membranes. In pathological conditions, this powerful but gentle antiseptic easily destroys most ordinary intruders. In either situation, TYREE's low pH helps restore and maintain the normal protective acidity of the healthy vagina.

For your next patient who needs effective non-irritating therapy, prescribe TYREE's Antiseptic Powder. Write today for a *free* professional sample.

FORMULA:
MENTHOL
THYMOL
EUCALYPTOL
PHENOL
BORIC ACID
SALICYLIC ACID
ZINC SULFATE(Dry)

TYREE'S ANTISEPTIC POWDER

In bottles of 2 ozs. 4 ozs. 8 ozs.

J. S. TYREE, CHEMIST, INC.
15th and H Streets, N.E., Washington 2, D. C.
Makers of CYSTODYNE, a Urinary Antiseptic

CLASSIFIED ADVERTISEMENTS

Advertisements under the headings listed are published without charge for those physicians whose names appear on the MEDICAL TIMES mailing list of selected general practitioners. To all others the rate is $3.50 per insertion for 30 words or less: additional words 10c each.

WANTED	FOR SALE
Assistants	Books
Physicians	Equipment
Locations	Practices
Equipment	FOR RENT
Books	MISCELLANEOUS

CLASSIFIED ADVERTISING FORMS CLOSE 15th of PRECEDING MONTH. If Box Number is desired all inquiries will be forwarded promptly. Classified Dept., MEDICAL TIMES, 67 Wall St., New York 5, N. Y.

WANTED (Physicians, Assistants, etc.)

ASSOCIATE in general practice wanted. Am located in middle of Bright Leaf Tobacco section. Money good and work isn't hard. Box 7A46, Medical Times.

AVAILABLE because of death, the general practice of a prominent physician in N. J. industrial town of 125,000. New, well equipped offices. Box 8A59, Medical Times.

ASSOCIATE for general practitioner. Percentage. Ohio license required. Well equipped office. Box 7A45, Medical Times.

ASSISTANT or partner wanted. Expect to retire within 5 years. Oregon. Box 8A56, Medical Times.

ASSISTANT in Geriatrics wanted. New York. Box 9A49, Medical Times.

COLORADO physician, well established seeks associate, who does surgery mainly. Give all details in application. Box 9A51, Medical Times.

COMBINED receptionist and technician for x-ray, EKG & BMR. For G.P.; hours: 12 to 8 p.m., 5 days a week. N.Y.C. Box 8A54, Medical Times.

DESIRE: PSYCHIATRIST, with board qualifications for location in building with other doctors. Opportunity and hospital facilities excellent. Calif. Personal interview required. Box 7A44, Medical Times.

MEDICAL ASSISTANT for physician's office. Laboratory experience. Please write giving age, training and experience. New Jersey. Box 9A48, Medical Times.

NURSE for Doctor's office. Florida. Box 9A50, Medical Times.

X-RAY technician. Female; thoroughly experienced. Diagnostic work; no therapy; knowledge of elementary laboratory work desirable. Private office. New Jersey. Box 9A47, Medical Times.

GENERAL PRACTITIONER desires assistant; reasonable starting pay and worthwhile future. Located in nice suburb of Pittsburgh, Pa. Box 7A50, Medical Times.

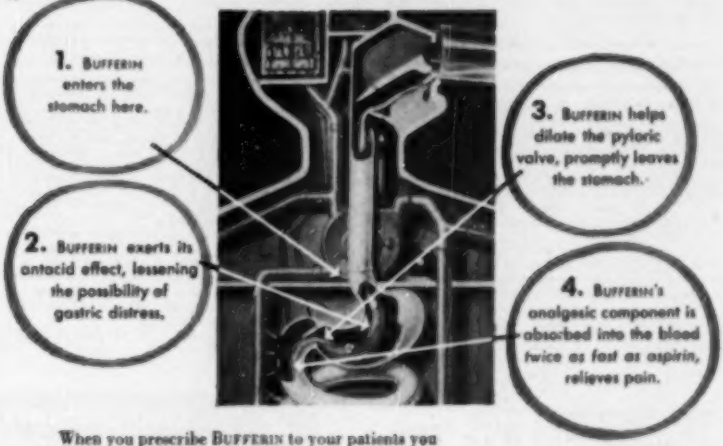
GOOD TERRITORY for young physician interested in rural practice in Chesapeake Bay area. Opportunity to step into an established practice. Box 7A49, Medical Times.

—Continued on page 84a

Give faster pain relief with BUFFERIN

ACTS TWICE AS FAST AS ASPIRIN

WITHOUT GASTRIC DISTRESS!

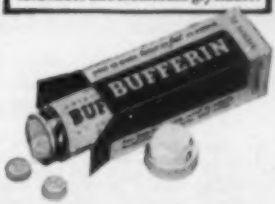


When you prescribe BUFFERIN to your patients you assure *faster relief of pain*. Clinical studies[1] show that within ten minutes after BUFFERIN is ingested, blood salicylate levels are as great as those attained by aspirin in twice this time. That is why BUFFERIN *acts twice as fast as aspirin*.

BUFFERIN has *greater gastric tolerance*. BUFFERIN'S antacid ingredients provide protection against the gastric distress so often seen with aspirin.[1] BUFFERIN, therefore, is especially suited for use when prolonged use of salicylates is indicated.

1. Effect of Buffering Agents on Absorption of Acetylsalicylic Acid J. Am. Pharm. A., Sc. Ed. 39:21, Jan. 1950.

In vials of 12 and 36 and bottles of 100. Scored for divided dosage. Each BUFFERIN tablet contains 5 grains of acetylsalicylic acid with optimal proportions of magnesium carbonate and aluminum glycinate.



BUFFERIN
is a trade-mark of the Bristol-Myers Company

A product of BRISTOL-MYERS COMPANY
19 West 50 St., New York 20, N. Y.

CLASSIFIED ADVERTISEMENTS

—Continued from page 82a

WANTED (Equipment, Homes, etc.)

INTERESTED in buying medical gadgets. Instruments of practical value for physical diagnosis or for treatment. Also interested in any ideas along this line. Making a collection. Box 7B7, Medical Times.

WANT TO BUY used instruments or complete office equipment. Desire inventory and condition of material. Prefer blanket price. La. Box 9B11, Medical Times.

WISH TO BUY: Suction & pressure unit in cabinet and May ophthalmoscope in good condition. Give details on make, year and price. Box 8B10, Medical Times.

WOULD like to exchange my office equipment for new. Box 9B12, Medical Times.

WANTED (Locations, Positions, etc.)

CERTIFIED in medicine & allergy; married—2 children. Age 42; good health. Experience as medical director of insurance company. Could assist in part-time work with small insurance co. Texas. Box 7C10, Medical Times.

GENERAL PRACTITIONER (interested in pediatrics) for past 8 years, would like to join a medical group in Nassau or Suffolk County. Box 7C9, Medical Times.

DESIRE TO PURCHASE active eye practice near N. Y. C. Will consider partnership. Can make substantial investment. Box 75C7, Medical Times.

PHYSICIAN wishes association with sanitarium. N.Y. metropolitan area. Will invest. Box 9C12, Medical Times.

PHYSICIAN, 35, married, wishes association with busy surgeon or preceptorship. Has 9 years general practice, 2 year internship. Prefer man within 20 mile radius of Newark, N. J. Box 7C8, Medical Times.

PRECEPTORSHIP or assistantship wanted with either a plastic surgeon or general surgeon or other surgical specialty by 35 year old married G.P. 8 years G.P. Practice successful—but wants to specialize. Box 7C11, Medical Times.

WANTED (Miscellaneous)

WISH TO PURCHASE: Ewing, J., "Neoplastic Diseases," 1940, Saunders; Joseph Needham, "Chemical Embryology," 3 vols., Cambridge. Box 7D7, Medical Times.

WANTED: Used Davis' Gyn. & Obs.; Brennemann Pediatrics. State condition, price and transportation. Box 9D8, Medical Times.

BOOK—"Oral Sepsis as a Cause of Septic Conditions" by W. Hunter; 1901 (London). Box 4D4, Medical Times.

FOR SALE (Homes, Sanataria, etc.)

FOR SALE—The finest home in Manteca, the heart of the richest dairy and agricultural country in California. Completed just prior to war, finest materials; three bedrooms so situated that two of the bedrooms could be converted into a beautiful office for doctor, dentist or any professional man interested in combining his office with a very beautiful home.

House is fully insulated and every room air-conditioned. Two thermistatically controlled heaters and an electric heater in bathroom.

Two car garage of pumice brick with a den 10' x 20' opening on to a barbecue and brick patio, 35' x 45'. Grounds are completely landscaped with a sprinkler system throughout.

This community does not have sufficient medical or dental offices and patients are forced to travel as far as 80 miles for consultations.

Owner—E. Volandri, 175 West Alameda Street, Manteca, Cal.

25 BED clinic hospital for sale. 10 rooms in clinic. Central Texas. Completely air-conditioned. 1200 admissions yearly. 200 majors, 400 minors, 125 obstetrical. Box 10E11, Medical Times.

ACTIVE GENERAL practice—4 bedroom, 3 bath home; 6 room office building. Moderate price for real estate only. Small town—near San Diego, Cal. hospitals. Box 8E10, Medical Times.

MIAMI BEACH, Fla. Completely equipped medical office, long established in exclusive section. Ready for immediate practice. Price less than first year's income. Terms. Personal reasons for selling. Would consider Locum Tenens. Box 7E8, Medical Times.

FOR SALE: Medical office bldg. in southern Cal. Non-metropolitan area, in town of about 5,000. Not close to city. Box 7E7, Medical Times.

FOR SALE OR RENT—28 bed, licensed convalescent home on 3 acre tract of land in southern Conn. Excellent retirement income on small income. Details by writing: Box 179, Wallingford, Conn., or Box 7E9, Medical Times.

FOR SALE (Practices)

COMBINED office-residence with general practice for sale in growing L. I. suburban community. Leaving to specialize. Box 7F17, Medical Times.

GENERAL practice for sale; New York suburb; busiest in town; 8 office rooms; all equipment. Cash payment required. Box 9F20, Medical Times.

FOR SALE: Going practice, established 25 years; home and office. Located in Bethlehem, Pa. Pop. 22,000. Box 7GE1, Medical Times.

LUCRATIVE general practice for sale. Home and office combination in southern N. J. Wish to leave to specialize. Can stay as long as necessary to introduce. Box 7F16, Medical Times.

PRACTICE FOR SALE. So. Texas town of 2,000. Only 2 other physicians in county of 9,000. Grossing in excess of $30,000, without surgery. 6½ room clinic, with or without equipment. Box 9F19, Medical Times.

PRACTICE FOR SALE: Southern Cal. office leased. Will transfer lease and introduce G. P. in January, 1951. Leaving to specialize. Box 8F18, Medical Times.

WELL ESTABLISHED practice and fully equipped office being offered to qualified M.D. Ill health is reason for leaving present location. Los Angeles, Calif. Phone MA 6-7017 or write Box 7F14, Medical Times.

60% INTEREST in small clinic for sale. Arizona. Box 7F13, Medical Times.

PRACTICE and 1½ yr. old, 23 room medical bldg. for sale. 10 rooms fully equipped. $50,000 industrial, general and surgical practice. Ideal setup for 3-4 man group practice. No.-East Ohio. City of 30,000. Box 7F15, Medical Times.

FOR SALE (Equipment)

CAMBRIDGE portable, string portable electrocardiograph. Excellent condition. $350. N. J. Box 7G37, Medical Times.

COLONIC IRRIGATION table, fully equipped with inlet & drain for plumbing installation. Box 7G35, Medical Times.

—Continued on following page

CLASSIFIED ADVERTISEMENTS

—Continued from preceding page

FOR SALE: Ruddick peritoneoscope, complete with walnut case—used only a few times—excellent condition—any reasonable offer accepted. Box 7G34, Medical Times.

CARDIOTRON—excellent condition—with Goldberger unipolar leads—reason for selling: restricting practice. Box 76G32, Medical Times.

PELTON instrument sterilizer; practically new; 6 x 18 x 8 with automatic shut-off. Mass. Box 9G45, Medical Times.

APPARATUS & INSTRUMENTS for sale. Office equipment in good condition and instruments for almost every surgical purpose. Chrome and stainless steel. Most like new. May be had very reasonably. From rural hospital close-out, Mo. Box 9G46, Medical Times.

EKG, basal metabolism and x-ray unit with all accessories for sale. Box 9-4G13, Medical Times.

CORYLLOS thoracoscope, unused, for sale. Arizona. Box 9G42, Medical Times.

ADMIRAL shortwave machine, for sale. Box 9G44, Medical Times.

FLUOROSCOPE (Mattern) practically new. 9 yr. guarantee on tube, $600.00; new cardiotron ECG machine with unipolar lead set up, $500.00; practically new McKesson metabolor, $200.00. No reasonable offer refused. Box 3G3, Medical Times.

BASAL METABOLISM MACHINE, McKesson, for sale. Perfect condition; reasonable. Box 5G21, Medical Times.

EXERCYCLE, excellent condition. $225.00 F.O.B. Box 3G1, Medical Times.

NEW 100 MA Keleket X-ray machine with fluoroscope and spot film attachments. Located in New England. Box 4G14, Medical Times.

OFFICE EQUIPMENT for sale. Box 4G16, Medical Times.

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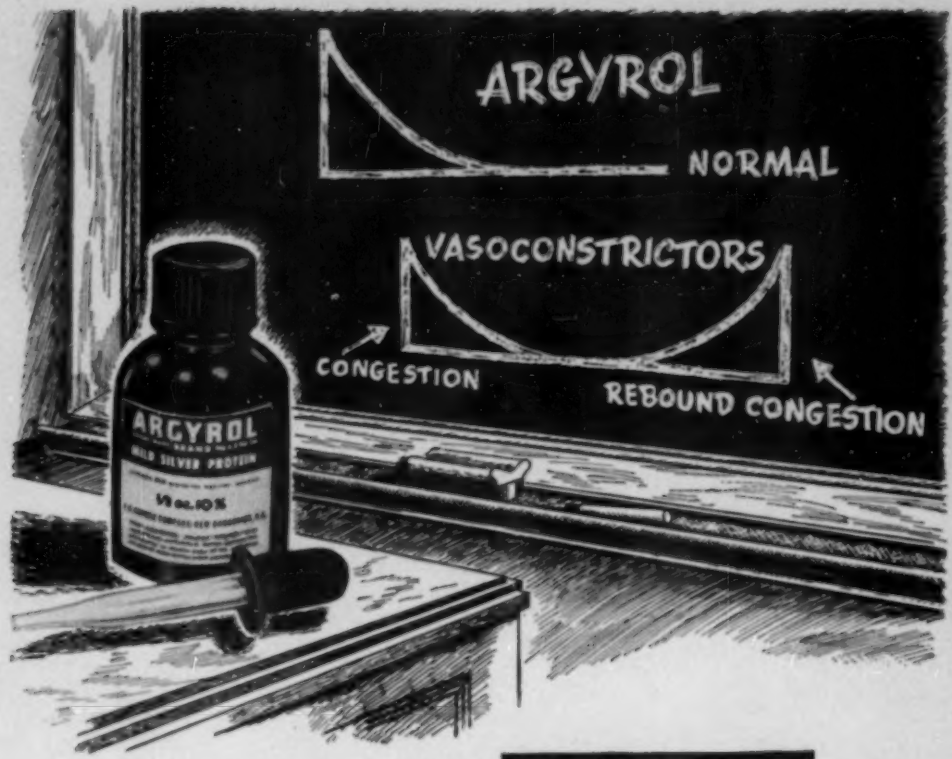

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